

City of Reedley, Community Development Department, 1733 9th Street, Reedley, CA 93654

#### Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration

Date: January 29, 2024

To: Public Agencies, Organizations, and Interested Parties

From: City of Reedley

Subject: Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration

Pursuant to the State of California Public Resources Code and the Guidelines for Implementation of the California Environmental Quality Act (CEQA), as most recently amended, this is to advise that the City of Reedley (City) has prepared an Initial Study to evaluate the environmental effects of the project identified below:

Project Title: East Huntsman Avenue Industrial Park

Project Sponsor: Kevin Lai, Tac LLC, 221 Chantecler Drive, Fremont, CA 94539

Project Location: 20349 East Huntsman Avenue, Reedley, CA 93654, Assessor's Parcel Numbers

(APN): 370-240-11.

**Project Description:** The proposed project would develop the approximately 42-acre project site into a 26-lot light industrial park. The proposed project would include the annexation of the project site into Reedley, after which the project site would be pre-zoned to the Light Industrial (ML) District and the existing Fresno County General Plan agricultural land use designation would change to Light Industrial as established in the City's General Plan. The proposed project would require approval of an annexation application, Sphere of Influence Application, a rezone (pre-zone), and a Tentative Subdivision Map.

**CEQA Project Status:** An Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for this project pursuant to the provisions of CEQA. The IS/MND determined that the proposed project would result in less-than-significant impacts, and therefore a Mitigated Negative Declaration is proposed. The Public Review Draft IS/MND and all related analysis are available on the City's website: https://reedley.ca.gov/community-development-department/ceqa-environmental-assessments/

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**Public Hearing:** The Planning Commission will consider the project at their Regular Meeting scheduled for March 7, 2024, at 5:00 p.m. (or thereafter).

**Public Review Period:** A 30-day public review period will begin on January 29, 2024. Written comments must be mailed, faxed, submitted in person, or via email to the contact person identified below no later than 5:00 p.m. on February 27, 2023. Please direct comments to:

Rodney L. Horton, MPA Community Development Director Community Development Department City of Reedley 1733 9th Street Reedley, CA 93654

Phone: 559-637-4200

Email: <a href="mailto:rodney.horton@reedley.ca.gov">rodney.horton@reedley.ca.gov</a>

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#### **PUBLIC REVIEW DRAFT**

# INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

# EAST HUNTSMAN AVENUE INDUSTRIAL PARK PROJECT REEDLEY, CALIFORNIA



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#### Submitted to:

Rodney L. Horton, Community Development Director Community Development Department 1733 Ninth Street Reedley, CA 93654

Prepared by:

LSA 2565 Alluvial Avenue, Suite 172 Clovis, California 93611 (559) 490-1210

Project No. 20231045.02





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#### LIST OF ABBREVIATIONS AND ACRONYMS

μg/m³ micrograms per cubic meter

μin/sec microinches per second

AAQS Ambient Air Quality Standards

AB Assembly Bill

ABM Activity-Based Model
AFY acre-feet per year

AID Alta Irrigation District

APN Assessor's Parcel Number

AWSC all-way stop control

Basin San Joaquin Valley Groundwater Basin

Basin Plan Water Quality Control Plan for the Tulare Lake Basin

BMPs Best Management Practices
BPS best performance standards

BRA Biological Resources Assessment

CAA Clean Air Act

CAAQS California Ambient Air Quality Standards

CAL FIRE California Department of Forestry and Fire Protection

CalEEMod California Emissions Estimator Model

CalEPA California Environmental Protection Agency

CALGreen Code California Green Building Standards Code
California Register California Register of Historical Resources

Cal-IPC California Invasive Plant Council

CalRecycle California Department of Resources Recycling and Recovery

Caltrans California Department of Transportation

CAP Climate Action Plan

CARB California Air Resources Board

CASQA California Storm Water Quality Association

CBC California Building Code

CCAP Climate Change Action Plan

CCR California Code of Regulations

CDFW California Department of Fish and Wildlife

CEC California Energy Commission

CEQA California Environmental Quality Act

CESA California Endangered Species Act

CFR Code of Federal Regulations

CGP Construction General Permit

CH<sub>4</sub> methane

CHRIS California Historical Resources Information System

City City of Reedley

CNDDB California Natural Diversity Database

CNEL Community Noise Equivalent Level

CNPS California Native Plant Society

CO carbon monoxide

CO<sub>2</sub> carbon dioxide

CO<sub>2</sub>e carbon dioxide equivalent

County County of Fresno

dB decibel

dBA A-weighted decibels

DOC California Department of Conservation

DPM diesel exhaust particulate matter

DTSC California Department of Toxic Substances Control

EIR Environmental Impact Report

EMFAC2021 California Emissions Factor Model, Version 2021

EO Executive Order

EPA United States Environmental Protection Agency

FEMA Federal Emergency Management Agency

FHWA Federal Highway Administration

FHWA-RD-77 108 FHWA Highway Traffic Noise Prediction Model

FMMP Farmland Mapping and Monitoring Program

Fresno COG Fresno Council of Governments

Fresno LAFCo Fresno County Local Agency Formation Commission

ft foot/feet

FTA Manual Transit Noise and Vibration Impact Assessment Manual

FTA Federal Transit Administration

GAMAQI Guidance for Assessing and Mitigating Air Quality Impacts

General Plan EIR Reedley General Plan 2030 Program EIR

GHG greenhouse gas

GPCD gallons per capita per day

GSP Groundwater Sustainability Plan

GWh gigawatt-hours

GWP Global Warming Potential

HARP2 Hotspots Analysis and Reporting Program

HCM Highway Capacity Manual

HCP Habitat Conservation Plan

HFCs hydrofluorocarbons

HRA Health Risk Assessment

HVAC heating, ventilation, air conditioning

IMP Integrated Master Plan in/sec inch/inches per second

IPaC Information for Planning and Conservation

ITE Institute of Transportation Engineers

KCUSD Kings Canyon Unified School District

KREGSA Kings River East Groundwater Sustainability Agency

kWh kilowatt-hours

L<sub>dn</sub> day-night average noise level

L<sub>eq</sub> equivalent continuous sound level

L<sub>max</sub> maximum instantaneous sound level

LOS level of service

LRA Local Responsibility Area

L<sub>V</sub> velocity in decibels

MBTA Migratory Bird Treaty Act

MEI maximally exposed individual

mgd million gallons per day

mpg miles per gallon
mph miles per hour

MRZ Mineral Resource Zone

MS4 Municipal Separate Storm Sewer Systems

 $MT\ CO_2e$  metric tons of carbon dioxide equivalent

N<sub>2</sub>O nitrous oxide

NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Commission
NCCP Natural Community Conservation Plan

NO<sub>2</sub> nitrogen dioxide

NPDES National Pollutant Discharge Elimination System

NRCS Natural Resources Conservation Service

O&M Operation and Maintenance

O<sub>3</sub> ozone

OEHHA California Office of Environmental Health Hazard Assessment

OHP Office of Historic Preservation

OSHA Occupational Safety and Health Administration

Pb lead

PCE passenger car equivalent

PFCs perfluorocarbons

PG&E Pacific Gas & Electric

ppb parts per billion

PPV peak particle velocity
PRC Public Resources Code

RFD Reedley Fire Department

RMP Risk Management Policy
RMS root-mean-square

ROG reactive organic gas

RPD Reedley Police Department

RTP Regional Transportation Plan

RWQCB Regional Water Quality Control Board

SB Senate Bill

SCS Sustainable Communities Strategy

SF<sub>6</sub> sulfur hexafluoride

SJVAB San Joaquin Valley Air Basin

SJVAPCD San Joaquin Valley Air Pollution Control District

SMARA Surface Mining and Reclamation Act

SMIP Stormwater Management Implementation Plan

SO<sub>2</sub> sulfur dioxide

SOI Sphere of Influence

SPL sound pressure level

SR-180 State Route 180

SUV sport utility vehicles

SWPPP Stormwater Pollution Prevention Plan

SWRCB State Water Resources Control Board

TACs toxic air contaminants

TCRs Tribal Cultural Resources

TIS Traffic Impact Study

TIS Guidelines Draft Guidelines for the Preparation of Traffic Impact Studies within the

County of Fresno

tpd tons per day

TRB Transportation Research Board

TWSC two-way stop control

URF unit risk factor

USDOT United States Department of Transportation

USFWS United States Fish and Wildlife Service

USGS United States Geological Survey

UWMP Urban Water Management Plan

v/c ratio volume-to-capacity ratio

VdB vibration velocity decibels

VHFHSZ Very High Fire Hazard Severity Zone

VMT vehicle miles traveled

VMT Guidelines Fresno County SB 743 Implementation Regional Guidelines

WEAP Worker Environmental Awareness Program

WWTP Wastewater Treatment Plant

#### 1.0 PROJECT INFORMATION

#### 1. Project Title:

East Huntsman Avenue Industrial Park Project

#### 2. Lead Agency Name and Address:

City of Reedley 1733 9th Street Reedley, CA 93654

#### 3. Contact Person and Phone Number:

Rodney L. Horton, MPA, Community Development Director 559-637-4200, Ext. 286

#### 4. Project Location:

20349 East Huntsman Avenue, Reedley, CA 93654 Assessor's Parcel Number (APN): 370-240-11

#### 5. Project Sponsor's Name and Address:

Kevin Lai Tac LLC 221 Chantecler Drive Fremont, CA 94539

#### 6. General Plan Designation:

Agriculture (Fresno County); Light Industrial (City of Reedley)

#### 7. Zoning:

Exclusive Agriculture (AE-20) (Fresno County)

#### 8. Description of Project:

The proposed project would develop the approximately 42-acre project site into a 26-lot light industrial park. The proposed project would include the annexation of the project site into Reedley, after which the project site would be pre-zoned to the Light Industrial (ML) District and the existing Fresno County General Plan agricultural land use designation would change to Light Industrial as established in the City's General Plan. The proposed project would require approval of an annexation application, Sphere of Influence Application, a rezone (pre-zone), and a Tentative Subdivision Map.

**Project Site.** The 42-acre project site is located at 20349 East Huntsman Avenue in the City of Reedley (City) Sphere of Influence (SOI), as shown in Figure 1-1 (all figures provided at the end of this chapter). The project site is currently used for growing agricultural crops and contains agricultural support buildings and one single-family residence. The project site is surrounded by agricultural uses and Reedley Sports Park to the north, agricultural uses to the south, rural

residential and agricultural uses to the east, and light industrial uses to the west. Traver Channel, an Alta Irrigation District (AID) channel, bounds the project site to the west and north. East Huntsman Avenue bounds the project site to the south. Figure 1-2 shows the project site and surrounding land uses.

**Project Characteristics.** The proposed project would divide the 42-acre project site into 26 lots, which would be developed with light industrial uses. The lots would include office, warehouse, retail uses, and truck maintenance building. Future tenants have not been identified. Additionally, 2.23 acres of parking would be provided including, employee, guest, and truck parking stalls. The proposed lots would be developed as described in Table 1.A below. Figure 1-3 shows the proposed project site plan.

Table 1.A: Proposed Light-Industrial Lots for Huntsman Avenue Industrial Park

Lot Number	Lot Size (acres)	Building Size (square feet)	Proposed Use
1	1.64	12,000	Office/Retail
2	0.63	8,000	Office/Warehouse
3	0.65	8,000	Office/Warehouse
4	0.65	8,000	Office/Warehouse
5	0.58	8,000	Office/Warehouse
6	0.52	8,000	Office/Warehouse
7	0.52	8,000	Office/Warehouse
8	0.58	8,000	Office/Warehouse
9	0.63	5,000	Office/Warehouse
10	0.65	10,000	Office/Warehouse
11	0.65	10,000	Office/Warehouse
12	1.87	22,000	Office/Warehouse
13	1.87	22,000	Office/Warehouse
14	1.01	15,000	Office/Warehouse
15	0.92	15,000	Office/Warehouse
16	0.92	16,500	Office/Warehouse
17	0.92	16,500	Office/Warehouse
18	0.92	16,500	Office/Warehouse
19	0.92	16,500	Office/Warehouse
20	1.02	15,000	Office/Warehouse
21	2.63	10,000	Office/Warehouse
22	2.31	60,000	Office/Warehouse
23	2.23	-	Parking
24	1.54	11,200	Truck Maintenance/Truck Wash
25	1.54	360	Guard Shack/Truck Parking
26	1.62	22,000	Office/Warehouse

Source: Compiled by LSA (2023)

Additionally, the proposed project would retain two existing structures and one dwelling unit within an approximately 0.93-acre outlot (i.e., Outlot A) located on the southeast corner of the project site; and would retain the adjacent Traver Channel within an approximately 2.14-acre outlot (i.e., Outlot B). The proposed project would retain the 25-foot-wide easements that exist

along both sides of the channel. Existing fencing along the project site's northern, southern and eastern boundary would be removed.

The proposed project would include solar fixtures and would comply with the latest California Green Building Standards Code (CALGreen Code) building measures and Title 24 standards.

Access, Circulation and Parking. Access to the project site would be provided by two ingress and egress driveways along East Huntsman Avenue. The westernmost access driveway would be 86 feet wide and would include two 42-foot-wide vehicle travel lanes separated by a 4-foot-wide median for vehicle ingress and egress to the project site. The easternmost access driveway would be 44 feet wide.

Vehicle circulation within the project site would occur through a network of internal driveways. The minimum drive aisle width for two-way driveways would be 25 feet. The minimum drive aisle width for two-way driveways with 90-degree parking on one side would be 27 feet. The minimum drive aisle width for two-way driveways with 90-degree parking on both sides would be 30 feet. Drive approaches designed pursuant to Reedley Standard Detail (ST-21)<sup>1</sup> would allow vehicle access to internals lots in the project site.

Pedestrian circulation a would occur through proposed 5-foot-wide pedestrian sidewalks located along the frontage of the project site with East Huntsman Avenue, and alongside internal driveways in the project site.

The proposed project would include 30 truck parking stalls, 40 regular guest parking stalls, and 555 parking stalls for employee use. The proposed project would also include truck loading zones in the southern and eastern portions of the project site. Additionally, the proposed project would include an overnight parking lot with capacity for approximately 100 semi-trucks in the project site.

**Landscaping.** The proposed project would include approximately 0.75-acre of landscaped areas along the Traver Channel and East Huntsman Avenue frontage. Additionally, each of the proposed 26 lots in the project site would include greenspace as required by the City, and meet Reedley's shading requirements.

**Lighting.** The proposed project would include exterior lighting on the project site for safety and building identification purposes.

**Utilities and Infrastructure.** Water supply and wastewater services for the proposed project would be provided by the City of Reedley. The proposed project would connect to a proposed 8-inch-diameter water main and 12-inch-diameter wastewater main along East Huntsman Avenue.

<sup>&</sup>lt;sup>1</sup> City of Reedley. 2020. Standard Plans. ST-21 - Commercial/Industrial Driveway Approach. March. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2022/11/2019\_Standard\_Plans\_Rev11-2022-1668553966.pdf (accessed August 3, 2023).

The City of Reedley would provide stormwater management services to the project site. Stormwater from the project site would be collected through surface and subsurface drainage infrastructure onsite and moved towards proposed stormwater collection and drainage infrastructure along East Huntsman Avenue.

Access for emergency response services including fire, police, and medical response services, would be provided through the two proposed driveways along East Huntsman Avenue. Dedicated fire lanes and turnarounds with an appropriate centerline turning radius would also be provided pursuant to requirements of the RFD.

Solid waste collection for the proposed project would be managed by Mid Valley Disposal, which maintains all solid waste collection in Reedley.

Electricity and natural gas services for the proposed project would be supplied by Pacific Gas & Electric (PG&E) through connections to existing service lines. No diesel backup generators would be provided.

**Project Construction.** Construction of the proposed project is anticipated to occur over a total 12-month period starting January 2025, and ending January 2026. The proposed project would not require any soil import/export. Additionally, Tier 3 equipment would be utilized during project construction.

#### 9. Surrounding Land Uses and Setting:

The 42-acre project site is located in the City of Reedley SOI, on the northwest corner of the intersection of East Huntsman Avenue and South Englehart Avenue. The project site is surrounded by agricultural uses and Reedley Sports Park to the north, agricultural uses to the south, rural residential and agricultural uses to the east, and light industrial uses to the west.

# 10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

- Fresno Local Agency Formation Commission Annexation
- City of Reedley Sphere of Influence Application, Tentative Subdivision Map, Pre-zone (Rezone) and Site Plan Review
- San Joaquin Valley Air Pollution Control District
- State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES) General Permit (with requisite Storm Water Pollution Prevention Plan, Conceptual Storm Water Pollution Prevention Plan, and Permanent Control Measures)
- 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.??

In compliance with Assembly Bill 52 (AB 52), on March 24, 2023, the City sent a letter regarding the proposed project to the Santa Rosa Indian Community of the Santa Rosa Rancheria based on a list of tribes provided by the Native American Heritage Commission (NAHC). On March 10,

2023, in response to the AB 52 consultation notice, the contacted Tribe requested an archaeological survey for the project site and the submittal of survey results to the Tribe, as well as the presence of an cultural/archeological monitor during construction activities on site. As such, AB 52 requirements for the proposed project have been fulfilled.

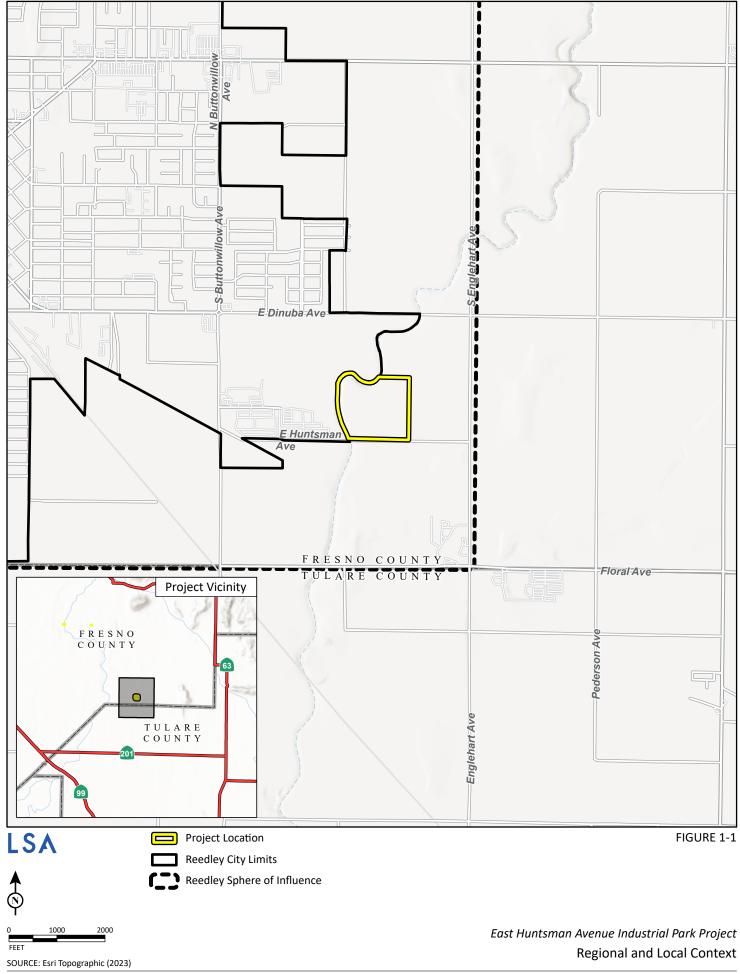
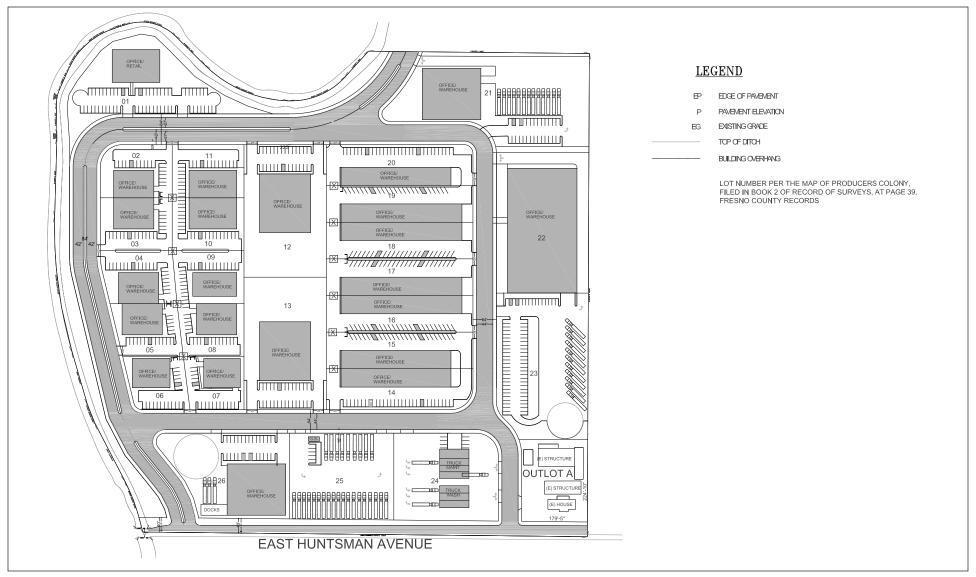




FIGURE 1-2 **LEGEND** 

**Project Location** 

East Huntsman Avenue Industrial Park Project Aerial Photograph of Project Site and Surrounding Land Uses



LSA

FIGURE 1-3



East Huntsman Avenue Industrial Park Project
Site Plan

#### 2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at

least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 3.0. ☐ Agriculture and Forestry Resources ☐ Air Quality ☐ Aesthetics ☐ Biological Resources ☐ Cultural Resources ☐ Energy ☐ Geology/Soils ☐ Greenhouse Gas Emissions ☐ Hazards & Hazardous Materials ☐ Hydrology/Water Quality ☐ Land Use/Planning ☐ Mineral Resources ☐ Noise ☐ Population/Housing ☐ Public Services ☐ Recreation ☐ Transportation ☐ Tribal Cultural Resources ☐ Utilities/Service Systems ☐ Wildfire ☐ Mandatory Findings of Significance 2.1 DETERMINATION On the basis of this initial evaluation: I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. 1/29/2024 Signature Date

#### 3.0 CEQA ENVIRONMENTAL CHECKLIST

#### 3.1 **AESTHETICS**

		Less Than		
	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?			$\boxtimes$	
<ul> <li>Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway</li> </ul>				$\boxtimes$
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable			$\boxtimes$	
zoning and other regulations governing scenic quality? d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

#### 3.1.1 Impact Analysis

#### a. Would the project have a substantial effect on a scenic vista?

**Less Than Significant Impact.** A scenic vista is generally defined as a public vantage point with an expansive view of a significant landscape feature. According to the Reedley General Plan 2030 Program EIR (General Plan EIR), the City identifies views of agricultural land from the urban fringes of the City, views of the Sierra Nevada mountain range east of the city, and views of the Kings River corridor, located along the western edge of the city, as potentially scenic vistas.<sup>2</sup>

The project site is currently vacant and used for growing agricultural crops. The project is located outside of Reedley city limits but within the City's SOI. The project site is surrounded by agricultural uses and Reedley Sports Park to the north, agricultural uses to the south, rural residential and agricultural uses to the east, and light industrial uses to the west. As such, potentially scenic views of agricultural uses near the fringes of the City are available from the project site. Additionally, distant views of the Sierra Nevada Mountains may also be visible from the project site.

The proposed project would develop the approximately 42-acre project site into a 26-lot light industrial park. The project site is currently zoned in Fresno County's Exclusive Agriculture (AE-20) District and is designated Agriculture in the Fresno County General Plan. The project would include the annexation of the project site into the City of Reedley, after which the site would be pre-zoned

City of Reedley. 2013. Draft Program EIR, Reedley General Plan 2030, SCH #2010031106. January 8. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2019/12/Draft-Program-EIR-City-of-Reedley-General-Plan-1-8-2013.pdf (accessed June 2023).

to the Light Industrial (ML) District, and the General Plan land use designation would be changed to Light Industrial. Although implementation of the proposed project would change the existing agricultural land use to Light Industrial, this land use change would be consistent with planned development per the City's General Plan. Additionally, the proposed Light Industrial uses would be similar to industrial uses directly west of the site, and therefore, the addition of a light industrial park at the project site would not substantially change views from public vista points. Additionally, the proposed light industrial park to be constructed at the project site would be consistent in size and scale to similar existing industrial uses in the vicinity and would comply with design requirements for the ML District as described in Chapter 9 of the Reedley Municipal Code, and would not introduce oversized elements that could obstruct distant views of the Sierra Nevada and foothills. Therefore, the proposed project would not have a substantial effect on scenic vistas in the vicinity of the project site, and the impact would be less than significant.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No Impact.** According to the California Department of Transportation (Caltrans)<sup>3</sup> mapping of State Scenic Highways, there are no State-designated scenic highways in Reedley. However, State Route 180 (SR-180), an Officially Designated State Scenic Highway, is located 9.12 miles northwest of the project site. Additionally, SR-168, an Eligible State Scenic Highway, is located approximately 22.3 miles northwest of the project site, in Clovis. No Officially Designated or Eligible State Scenic Highways are located within or in the immediate vicinity of the project site. Therefore, the proposed project would not impact a designated or eligible State Scenic Highway or impact scenic resources located within the highway segments or its viewshed. Therefore, no impact on scenic resources within a State Scenic Highway would occur as a result of the proposed project.

c. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The proposed project would divide the 42-acre project site into 26 lots, which would be developed with light industrial uses. The lots would include office, warehouse and retail uses, as well as parking in the form of employee or truck parking stalls, as applicable. The project site is currently vacant and used for growing agricultural crops. The project site is surrounded by agricultural uses and Reedley Sports Park to the north, agricultural uses to the south, rural residential and agricultural uses to the east, and light industrial uses to the west. The proposed project would change the agricultural use of the site to a light industrial use. Furthermore, the proposed project would introduce Light Industrial (ML) development into a site zoned within the Exclusive Agricultural Zoning District (AE-20) of Fresno County.

California Department of Transportation (Caltrans). State Scenic Highways. Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed June 2023).

The proposed project is located within the City of Reedley's proposed SOI, and planned for industrial development. The proposed project would require approval from Fresno County Local Agency Formation Commission (Fresno LAFCo) for annexation to the City of Reedley. After annexation to the city, site zoning would be compatible with the proposed light industrial use of the proposed project. The Project Applicant would comply with development standards required for the proposed zoning. Additionally, the light industrial park to be constructed on the project site would be consistent in size and scale to existing industrial uses directly west of the project site. Therefore, the proposed project would not conflict with applicable zoning or other regulations governing scenic quality in the City and would not substantially degrade the existing visual character or quality of public views of the project site and its surroundings, and the impact would be less than significant.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The proposed project would divide the 42-acre project site into 26 lots, which would be developed with light industrial uses. The lots would include office, warehouse and retail uses, as well as parking in the form of employee or truck parking stalls, as applicable. The construction of new buildings and infrastructure would introduce new sources of light into the project site and vicinity. Compliance with California Building Code (CBC) (Title 24, California Code of Regulations [CCR]) standards would reduce potential light and glare impacts. Furthermore, the City's General Plan and Municipal Code outlines performance standards related to exterior lighting to reduce impacts from new light sources.

Title 10, Zoning Regulations, from the City's Municipal Code includes lighting regulations for off street parking, signs, and industrial areas to deflect light away from adjoining properties and prevent light spillage, glare, or annoyance to persons on or inside adjoining properties or to public or private rights of way. Additionally, as described in Chapter 19, Site Plan Review, of the Municipal Code, proposed lighting for the project site would need to be arranged as to deflect the light away from adjoining properties in compliance with applicable legislative policies relating to traffic safety, street dedications and street improvements and environmental quality. Additionally, Policy COSP 4.8.7 of the General Plan prohibits continuous all-night outdoor lighting of construction sites, which would limit construction activities to daylight hours, reducing potential impacts related to nighttime glare.

Required compliance with these regulations would ensure that light and glare from the project would not adversely affect daytime or nighttime views in the area. Additionally, the new sources of light and glare introduced by the proposed project would be comparable to the existing industrial uses located directly west of the project site. Therefore, the adverse impacts related to light and glare resulting from the proposed project would be less than significant.

#### 3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation (DOC) as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?			$\boxtimes$	
<ul> <li>b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?</li> </ul>			$\boxtimes$	
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				$\boxtimes$
d. Result in the loss of forest land or conversion of forest land to non-forest use?				$\boxtimes$
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			$\boxtimes$	

#### 3.2.1 Impact Analysis

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

**Less Than Significant Impact.** The project site is located within the City of Reedley's SOI, in an agricultural area planned for development with buildout of the General Plan, as shown in Figure 6 of the General Plan EIR.<sup>4</sup> The project site is surrounded by agricultural uses and Reedley Sports Park to the north, agricultural uses to the south, rural residential and agricultural uses to the east, and light

City of Reedley. 2013. Reedley General Plan 2030. Figure 6 – Important Farmlands Map. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2019/12/Draft-Program-EIR-City-of-Reedley-General-Plan-1-8-2013.pdf (accessed August 2023).

industrial uses to the west. The project site is also classified as "Prime Farmland", "Unique Farmland", and "Farmland of Statewide Importance" by the DOC's Farmland Mapping and Monitoring Program (FMMP)<sup>5</sup>. Therefore, development of the proposed project would result in the conversion of Prime Farmland, Unique Farmland and Farmland of Statewide Importance to a non-agricultural use.

As previously discussed, the project site is planned for light industrial development under the General Plan. The General Plan EIR contains a range of goals and policies which are meant to minimize the potential for premature conversion of important farmland within the City's SOI. By managing growth into agricultural areas in a measured way, agricultural use of land within the SOI would remain viable until such time as the land is annexed to the City and developed for non-agricultural use. These goals and policies include the following:

**Policy LU 2.5.1:** Within areas outside the city limits, the City should encourage Fresno County to:

- (a) Maintain an exclusive agricultural zone district.
- (b) Maintain a minimum permitted lot size for agricultural land which assures that the land can be used for agricultural purposes.

**Policy LU 2.5.2:** Development standards shall incorporate measures to protect and preserves agricultural land.

**Policy LU 2.5.4:** Adopt a right-to-farm ordinance.

Policy LU 2.5.5: Consider evaluating and adopting an agricultural land mitigation policy.

**Policy LU 2.5.7:** Require contiguous development within the Sphere of Influence unless it can be demonstrated that the development of contiguous property is infeasible.

**Policy LU 2.5.8:** Implement an annexation policy that is based on annexing land for residential development only when at least 80 percent of the residentially designated land inside city limits is developed.

**Policy LU 2.5.9:** Work with Fresno County and Fresno LAFCO to maintain agricultural designations in areas outside the planning area and the Reedley Sphere of Influence.

**Policy LU 2.5.11:** The Plan should foster the establishment of a concentrated urban development pattern, with land outside the planned urban area being designated exclusively for Agriculture.

**Policy LU 2.5.12:** New urban development should occur in an orderly manner with initial development occurring on the available undeveloped properties which are closer to the built-up area.

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California Department of Conservation (DOC). 2018. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed August 2023).

However, the City of Reedley General Plan identifies that build out of the General Plan would result in a significant and unavoidable impact related to the conversion of Important Farmland to non-agricultural uses. Even with implementation of an agricultural land mitigation policy pursuant to Policy LU 2.5.5, which may include a fee or permanent conservation easement requirements, the loss of agricultural land would still be considered significant. Therefore, implementation of General Plan policies outlined above, or agricultural land mitigation measures would not prevent the ultimate conversion of farmlands in the Reedley Planning Area, and the impact of this conversion would be significant and unavoidable.

As discussed above, Figure 6 in the Agricultural Resources section of the General Plan EIR identifies the project site among locations with Important Farmland in the City's Planning Area planned to be converted to non-agricultural uses through buildout of the General Plan. As such, development of the proposed project would be consistent with planned growth under the General Plan. Additionally, impacts to farmland associated with development of the project site have already been evaluated in the City's General Plan EIR. Therefore, the proposed project would not result in new impacts to Important Farmland that have not been evaluated in a previous environmental review document. A less than significant impact would occur.

#### b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less Than Significant Impact. As shown in Figure 7 of the General Plan EIR, the project site is not subject to a Williamson Act contract. However, the project site is zoned within the Exclusive Agricultural Zoning District (AE-20) of Fresno County. The proposed project would include annexation of the project site into the city of Reedley. The Project Applicant would comply with applicable requirements of the annexation application process and would pay all applicable fees. After annexation of the project site to the city of Reedley, the project would comply with the new zoning designation of the project site per the City's Zoning Code without the proposed development being inconsistent with agricultural zoning.

Furthermore, the City's General Plan identified a significant and unavoidable impact related to conversion of agricultural land uses to non-agricultural use upon development in the City's SOI area. As a result, the potential impacts related to conflicts with existing zoning for agricultural use have been previously addressed in the General Plan EIR, and this project would not result in a new impact. As a result, a less-than-significant impact would occur.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

**No Impact.** The project site is zoned within the Exclusive Agricultural Zoning District (AE-20) of Fresno County. The project site is not currently used for timberland production, nor is it zoned for forest land or timberland. No forest lands or timberland are located on the project site. The proposed project would not conflict with the existing zoning for, or cause rezoning of forest land or conversion of forest land to non-forest uses. Therefore, the proposed project would have no impact on forest land or timberland.



d. Would the project result in the loss of forest land or conversion of forestland to non-forest use?

**No Impact.** Please refer to the discussion for Response c) above. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses. Therefore, the proposed project would have no impact.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less Than Significant Impact. Please refer to Responses a) and c) of this section. The project site is not used for timberland production or zoned for forest land or timberland. The project site is classified as "Prime Farmland", "Unique Farmland", and "Farmland of Statewide Importance" by the FMMP. The proposed project would result in the conversion of farmland to nonagricultural uses. However, conversion of farmland resulting from the proposed project has already been identified in the General Plan EIR, and it would be consistent with planned growth in Reedley under the General Plan. As a result, the proposed project would not result in the conversion of forestland or timberland, or the unplanned conversion of farmland beyond what has been identified by the General Plan. Therefore, the impact would be less than significant.

#### 3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
<ul> <li>a. Conflict with or obstruct implementation of the applicable air quality plan?</li> </ul>				
b. 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?		$\boxtimes$		
c. Expose sensitive receptors to substantial pollutant concentrations?			$\boxtimes$	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

#### 3.3.1 Impact Analysis

The proposed project is located in the city of Reedley. Reedley is part of the San Joaquin Valley Air Basin (SJVAB), which is within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is responsible for air quality regulation within the eight-county San Joaquin Valley region.

Both the State of California and the federal government have established health-based Ambient Air Quality Standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), ozone ( $O_3$ ), nitrogen dioxide ( $NO_2$ ), sulfur dioxide ( $SO_2$ ), lead ( $PO_3$ ), suspended particulate matter less than 2.5 microns in size ( $PM_{2.5}$ ) and particulate matter less than 10 microns in size ( $PM_{10}$ ). The SJVAB is designated as non-attainment for  $O_3$  and  $PM_{2.5}$  for federal standards and non-attainment for  $O_3$ ,  $PM_{10}$ , and  $PM_{2.5}$  for State standards.

Air quality monitoring stations are located throughout the nation and maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the United States Environmental Protection Agency (EPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Ambient Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the EPA. In addition, different classifications of attainment, such as marginal, moderate, serious, severe, and extreme, are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS. The SJVAB attainment statuses for each of the criteria pollutants are listed in Table 3.3.A.

**Table 3.3.A: SJVAB Air Quality Attainment Status** 

Pollutant	Federal	State
Ozone (1-hour)	No Federal Standard	Nonattainment/Severe
Ozone (8-hour)	Nonattainment/Extreme	Nonattainment
PM <sub>10</sub>	Attainment	Nonattainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified

Source: Ambient Air Quality Standards & Attainment Status - San Joaquin Valley Attainment Status. (San Joaquin Valley Air Pollution Control District, n.d.-a)

SJVAB = San Joaquin Valley Air Basin

 $PM_{2.5}$  = particulate matter less than 2.5 microns in size  $PM_{10}$  = particulate matter less than 10 microns in size

## a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact with Mitigation Incorporated. The California Environmental Quality Act (CEQA) requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the SJVAB into attainment, the SJVAPCD adopted the 2022 Plan for the 2015 8-Hour Ozone Standard in December 2022 to satisfy Clean Air Act (CAA) requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard. To assure the SJVAB's continued attainment of the EPA PM<sub>10</sub> standard, the SJVAPCD adopted the 2007 PM<sub>10</sub> Maintenance Plan in September 2007. SJVAPCD Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions) is designed to reduce PM<sub>10</sub> emissions generated by human activity. The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> Standards to address the region's attainment strategy for the federal PM<sub>2.5</sub> standards, with the latest standard of 12 micrograms per cubic meter (μg/m³) established in 2012.

For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, construction of the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Implementation of Mitigation Measure AIR-1 would further reduce construction dust impacts. As discussed below, long-term operational emissions associated with the proposed project, including area, energy, and mobile source emissions, would also not exceed SJVAPCD established significance thresholds. Therefore, impacts related to the proposed project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant with mitigation.

b. Would the project 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?

Less Than Significant Impact with Mitigation Incorporated. The SJVAB is designated as non-attainment for  $O_3$  and  $PM_{2.5}$  for federal standards and non-attainment for  $O_3$ ,  $PM_{10}$ , and  $PM_{2.5}$  for State standards. SJVAPCD nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Short-Term Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO<sub>x</sub>, reactive organic gas (ROG), directly-emitted particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), and toxic air contaminants (TACs) such as diesel exhaust particulate matter (DPM). Site preparation and project construction would involve grading, paving, and other activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM<sub>10</sub> emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM<sub>10</sub> emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SJVAPCD Regulation VIII is designed to reduce  $PM_{10}$  emissions generated by human activity. The SJVAPCD has established Regulation VIII measures for reducing fugitive dust emissions ( $PM_{10}$ ). With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related  $PM_{10}$  emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO,  $SO_2$ ,  $NO_x$ , ROGs and some soot particulate ( $PM_{2.5}$  and  $PM_{10}$ ) in exhaust emissions. If construction activities were to increase traffic congestion in the



area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using the California Emissions Estimator Model, version 2022.1 (CalEEMod) as recommended by the SJVAPCD. Construction of the proposed project is anticipated to occur over a total 12-month period starting January 2025, and ending January 2026, which was included in CalEEMod. The proposed project would not require any soil import/export. As identified in the Project Description, the proposed project would use Tier 3 construction equipment, which was included in CalEEMod. Other construction details are not yet known; therefore, default assumptions (e.g., construction fleet activities and worker and vendor trips) from CalEEMod were used.

Construction-related emissions for each year of construction are presented in Table 3.3.B. CalEEMod output sheets are included in Appendix A.

**Table 3.3.B: Project Construction Emissions** 

Veer	Emissions (tons per year)						
Year	ROGs	NO <sub>X</sub>	СО	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
2025	0.8	1.8	2.5	<0.1	0.3	0.1	
2026	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Maximum Annual Construction Emissions	0.8	1.8	2.5	<0.1	0.3	0.1	
Significance Thresholds	10.00	10.00	100.00	27.0	15.00	15.00	
Exceed Threshold?	No	No	No	No	No	No	

Source: Compiled by LSA (October 2023).

CO = carbon monoxide

 $PM_{10}$  = particulate matter less than 10 microns in size

NO<sub>X</sub> = nitrous oxides

ROGs = reactive organic compounds

 $NO_X = nitrous$  oxides  $PM_{2.5} = particulate$  matter less than 2.5 microns in size

SO<sub>2</sub> = sulfur dioxide

As shown in Table 3.3.B construction emissions associated with the project would not exceed SJVAPCD thresholds for ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. In addition to the construction period thresholds of significance, the SJVAPCD has implemented Regulation VIII measures for dust

control during construction. These control measures are intended to reduce the amount of PM<sub>10</sub> emissions during the construction period. Implementation of the fugitive dust control measures outlined in Mitigation Measure AIR-1 would ensure that the proposed project complies with Regulation VIII and further reduces the short-term construction period air quality impacts.

#### Mitigation Measure AIR-1

Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive  $PM_{10}$  Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

 All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/ suppressant, covered with a tarp or other suitable cover or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the
  accumulation of mud or dirt from adjacent public streets at the
  end of each workday. (The use of dry rotary brushes is expressly
  prohibited except where preceded or accompanied by sufficient
  wetting to limit the visible dust emissions. Use of blower
  devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of out-door storage piles, said piles shall be effectively stabilized of fugitive dust emission utilizing sufficient water or chemical stabilizer/suppressant.

With implementation of Mitigation Measure AIR-1, construction of the proposed project would not result in a cumulatively considerable net increase of  $PM_{10}$  or any criteria pollutant for which the project region is non-attainment under an applicable NAAQS or California Ambient Air Quality Standard (CAAQS) and impacts would be less than significant.

Long-Term (Operational) Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle and truck trips), energy sources (e.g., electricity and natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment) related to the proposed project.  $PM_{10}$  emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of  $PM_{10}$  occurs when vehicle tires pulverize small rocks and pavement, and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity or

natural gas) and the emission factor of the fuel source. Major sources of energy demand include building mechanical systems, such as heating and air conditioning, lighting, and plug-in electronics, such as refrigerators or computers. Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. The emission factor is determined by the fuel source, with cleaner energy sources, like renewable energy, producing fewer emissions than conventional sources.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment and the use of consumer products.

Emission estimates for operation of the project were calculated using CalEEMod. Model results are shown in Table 3.3.C. Trip generation rates for the project were based on the project's trip generation estimate (as identified in Section 4.17, Transportation), which assumes the proposed project would generate 691 average daily trips, including 517 passenger cars, 38 two-axle trucks, 31 three-axle trucks, and 105 four+-axle trucks. This analysis assumes that the four+-axle truck trips would travel approximately 40 miles. To be conservative, separate CalEEMod analyses were prepared for the operational analysis for the proposed project. One CalEEMod run evaluated operational and vehicle trip emissions and another CalEEMod run evaluated four+-axle truck trip emissions. Where project-specific data were not available, default assumptions from CalEEMod were used to estimate project emissions.

The primary emissions associated with the project are regional in nature, meaning that air pollutants are rapidly dispersed on release or, in the case of vehicle emissions associated with the project; emissions are released in other areas of the SJVAB. The annual emissions associated with project operation are identified in Table 3.3.C for ROGs, NOx, CO, SOx, PM<sub>10</sub>, and PM<sub>2.5</sub>.

**Table 3.3.C: Project Construction Emissions** 

Source	Emissions (tons per year)					
Source	ROGs	NOx	со	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Mobile Sources – Vehicles and Light Duty Trucks	0.3	0.2	1.9	<0.1	0.4	0.1
Mobile Sources – Heavy Heavy Duty Trucks	<0.1	3.0	0.6	<0.1	0.7	0.2
Area Source Emissions	1.7	<0.1	1.4	<0.1	<0.1	<0.1
Energy Source Emissions	<0.1	0.7	0.6	<0.1	0.1	0.1
Total Operation Emissions	2.0	3.9	4.5	<0.1	1.2	0.4
Significance Thresholds	10.00	10.00	100.00	27.0	15.00	15.00
Exceed Threshold?	No	No	No	No	No	No

Source: Compiled by LSA (October 2023).

CO = carbon monoxide  $PM_{10}$  = particulate matter less than 10 microns in size

 $NO_X$  = nitrous oxides ROGs = reactive organic compounds

 $PM_{2.5}$  = particulate matter less than 2.5 microns in size  $SO_2$  = sulfur dioxide

The results shown in Table 3.3.C indicate the project would not exceed the significance criteria for annual ROGs,  $NO_X$ , CO,  $PM_{10}$  or  $PM_{2.5}$  emissions. As such, operation of the proposed project would not result in a cumulatively considerable net increase of  $PM_{10}$  or any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standards and impacts would be less than significant.

## c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. This section describes the potential impact on sensitive receptors from construction and operation of the proposed project based on a Health Risk Assessment (HRA) prepared for the project. Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. The closest sensitive receptor includes the single-family residence located adjacent to the eastern border of the project site along Huntsman Avenue.

For the purposes of an HRA, short-term emissions are of concern for analyzing acute health impacts, and long-term emissions are of concern for analyzing chronic and carcinogenic health impacts. A screening-level multi-pathway assessment has been conducted. This technique was chosen as recommended in the Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxic Hot Spots Program Risk Assessment Guidelines*. The analysis herein has been conducted in accordance with the guidelines in the SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) and the SJVAPCD *Guidance for Air Dispersion Modeling*.

This HRA has been conducted using three models: (1) CARB's California Emissions Factor Model, Version 2021 (EMFAC2021) for on-road vehicle emissions factors and percentages of fuel type within the overall vehicle fleet; (2) the EPA's AERMOD air dispersion model to determine how the TACs would move through the atmosphere after release from sources both on site and on surrounding roadways; and (3) CARB's HARP2 model to translate the pollutant concentrations from AERMOD into individual health risks at any sensitive receptor locations surrounding the project site.

The OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, DPM made people with allergies more susceptible to the materials to which they were allergic, such as dust and pollen. Exposure to DPM also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM.

The conservative nature of this analysis is due primarily to the following three factors:

• The CARB-adopted diesel exhaust unit risk factor (URF) of 300 in 1 million  $\mu g/m^3$  is based on the upper 95<sup>th</sup> percentile of estimated risk for each of the epidemiological studies used to develop

California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed November 2023).

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2006. Guidance for Air Dispersion Modeling. Website: www.valleyair.org/busind/pto/Tox\_Resources/Modeling%20Guidance.pdf (accessed November 2023).

the URF. Therefore, the risk factor is already representative of the conservative risk posed by DPM.

- The risk estimates assume sensitive receptors would be subject to DPM 24 hours per day, 350 days per year. As a conservative measure, SJVAPCD does not recognize indoor adjustments for residents. However, typical people spend the majority of their time indoors versus remaining outdoors 24 hours per day, 350 days per year.
- The exposure to DPM is assumed to be constant for the given period analyzed (i.e., 70 years).
   However, emissions from DPM are expected to substantially decrease in the future with the implementation of standard regulatory requirements and technological advancement to reduce DPM.
- The emissions derived assume that every truck accessing the project site will idle for 15 minutes.

Improvements over the last 40 years to diesel fuel and diesel engines have resulted in lower emissions of some of these contaminants. These improvements have resulted in a 75 percent reduction in particle emissions from diesel-powered trucks and other equipment result in an 85 percent reduction as compared to 2000 levels. These improvements are anticipated to continue into the foreseeable future.

Project Construction – Toxic Air Contaminants. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the CARB exposure methodology with the air dispersion modeling performed using the EPA dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data. Table 3.3.D, below, identifies the results of the analysis assuming the use of Tier 3 construction equipment, as proposed by the project, at the maximally exposed individual (MEI), which is the nearest sensitive receptor. Model snap shots of the sources are shown in Appendix B.

Table 3.3.D: Health Risk Levels from Project Construction to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor Risk	16.20	0.021	0.000
School Receptor Risk	0.45	0.001	0.000
Worker Receptor Risk	0.19	0.015	0.000
Threshold	20.0	1.0	1.0

California Environmental Protection Agency Office of Environmental Health Hazard Assessment, and the American Lung Association of California, 2001. *Health Effects of Diesel Exhaust*. May 21. Website: https://oehha.ca.gov/air/health-effects-diesel-exhaust (accessed November 2023).

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Table 3.3.D: Health Risk Levels from Project Construction to Off-Site Receptors

	Carcinogenic Inhalation Health	Chronic Inhalation	Acute Inhalation
	Risk in One Million	Hazard Index	Hazard Index
Exceed?	No	No	No

Source: Compiled by LSA (November 2023).

As shown in Table 3.3.D, the maximum cancer risk for the residential receptor MEI would be 16.20 in 1 million, which would not exceed the SJVAPCD cancer risk threshold of 20 in 1 million. The school receptor risk would be 0.45 in one million and the worker receptor risk would be 0.19 in 1 million, which would also not exceed the threshold. The chronic hazard index would be 0.021 for the residential receptor MEI, 0.001 for the school receptor MEI, and 0.015 for the worker receptor MEI. In addition, the acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, construction of the proposed project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations and this impact would be less than significant.

Project Operation – Toxic Air Contaminants. To determine the potential health risk to people living and working near the proposed project associated with the exhaust of diesel-powered trucks and equipment, LSA conducted an HRA for the proposed project. The first step of an HRA is to characterize the project-related emissions of TACs. As identified in Section 4.17, Transportation, the proposed project would generate 691 average daily trips, including 517 passenger cars, 38 two-axle trucks, 31 three-axle trucks, and 105 four+-axle trucks. The trucks would access the site by East Huntsman Avenue. As identified in the Project Description, the proposed project would include truck loading zones in the southern and eastern portions of the project site. As the project would contain multiple loading docks, offsite queuing of trucks is not anticipated. While the TAC emissions from gasoline-powered vehicles have a small health effect compared to DPM, this HRA includes both gasoline- and diesel-powered vehicle emissions. For the diesel exhaust emissions, it is sufficient to only consider the DPM portions of the exhaust; all the TACs for the gasoline exhaust emissions are contained in the ROG emissions. Using speciation data from CARB, the emission rates of the TAC components are derived from the total ROG emissions. This data is attached.

Project trucks would operate in two modes: stationary idling and moving on and off the site. The emissions from trucks while idling result in a much higher concentration of TACs at nearby sensitive receptors compared to the emissions from moving trucks. This is due to the dispersion of emissions that occurs with distance and with travel of the vehicle. For this HRA, the truck travel emissions were modeled as a series of volume sources along the on-site driveway and along East Huntsman Avenue going east and west of the site driveway. LSA assumed vehicles traveling on site would maneuver slowly, averaging approximately 5-15 miles per hour (mph), and that vehicles traveling on roadways would average 5-55 mph.

The idling emissions of trucks operating on the project site were modeled as point sources within the area sources representing the planned loading docks. EMFAC2021 was used to determine the emissions factors of idling and operating diesel trucks to determine the total emissions of DPM. While it is expected that the truck emissions rate will continue to reduce over time, an HRA only

allows for a single emission rate to represent the entire 70-year exposure period. The use of emissions factors for the year 2024 was used as a conservative estimate of emissions.

American Meteorological Society/Environmental Protection Agency Regulatory Model Dispersion Modeling. In order to assess the dispersion of emissions associated with the project, air dispersion modeling was performed using AERMOD. The model is approved by the EPA when estimating the air quality impacts associated with point and fugitive sources in simple and complex terrain. The model was used to calculate the annual average pollutant concentrations associated with each emitting source. Inputs for each emitting source were based on the characterizations described above. Details of these inputs are included in Attachment B.

For the volume sources used to represent on-road mobile source activity, vertical (sigma z) dispersion parameters were developed as described in the SJVAPCD's modeling guidance for trucks. For the truck unloading locations, individual point sources represent the trucks idling at each loading dock. For all the idling sources, the release parameters were set to the SJVAPCD default parameters.

The model requires additional input parameters, including local meteorology. Due to the model's sensitivity to individual parameters (e.g., wind speed, temperature, and direction), the EPA recommends meteorological data used as input into dispersion models be selected on the basis of relative spatial and temporal conditions that exist in the area of concern. As such, 5 years of meteorological data from SJVAPCD's Fresno Airport Monitoring Station<sup>9</sup> (the nearest available station) was used to represent local weather conditions and prevailing winds.

Hotspots Analysis and Reporting Program Modeling. CARB's HARP2 model is a tool that assists with the programmatic requirements of the Air Toxics "Hot Spots" Program (Assembly Bill [AB] 2588). HARP2 was used to translate the TAC concentrations from AERMOD into long-term carcinogenic and chronic, and short-term acute health risk levels following the guidance in the SJVAPCD and OEHHA risk assessment guidelines. These guidelines specify a minimum set of TAC pathways and HARP2 modeling options for the carcinogenic assessment.

To estimate chronic noncancer risks at residential receptors, the "RMP-(Risk Management Policy) Derived Method" risk-calculation option was used. Following the OEHHA guidance, an 8-hour chronic noncancer risk was calculated for residential receptors because the project would operate more than 8 hours per day and 5 days per week.

The dose-response relationship for a specific pollutant describes the association between exposure and the observed response (health effect). In other words, the relationship estimates how different levels of exposure to a pollutant change the likelihood and severity of health effects. The dose-response relationship (the response occurring with increasing doses) varies with each pollutant, individual sensitivity, and type of health effect. Combining the results of the emission characterization and dispersion modeling described above with the dose response

San Joaquin Valley Air Pollution Control District (SJVAPCD). n.d.-b. Meteorological Data for AERMOD. Website: http://www.valleyair.org/busind/pto/Tox\_Resources/AirQualityMonitoring.htm (accessed November 2023).

assessment gives an estimate of the increased health risk for an individual exposed to the maximum predicted long-term concentrations of TACs.

Discrete variants for daily breathing rates, exposure frequency, and exposure duration were default rates as presented in the OEHHA guidance document entitled *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*<sup>10</sup> and guidance from SJVAPCD.

**Impact Analysis.** The carcinogenic and chronic health risks from the proposed project are shown in Table 3.3.E. The HRA model snapshots and outputs are included in Appendix B.

Table 3.3.E: Health Risks Levels from Project Operation to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor Risk	6.75	0.002	0.000
School Receptor Risk	0.55	0.004	0.000
Worker Receptor Risk	1.71	0.004	0.000
Threshold	20.0	1.0	1.0
Exceed?	No	No	No

Source: Compiled by LSA (November 2023).

As shown in Table 3.3.E, the maximum cancer risk for the residential receptor MEI would be 6.75 in 1 million, which would not exceed the SJVAPCD cancer risk threshold of 20 in 1 million. The school receptor risk would be 0.55 in 1 million and the worker receptor risk would be 1.71 in 1 million, which would also not exceed the threshold. The chronic hazard index would be 0.002 for the residential receptor MEI, 0.000 for the school receptor MEI, and 0.004 for the worker receptor MEI. In addition, the acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, operation of the proposed project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations and this impact would be less than significant.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. During construction, the various diesel-powered vehicles and equipment in use on site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. Because the project's potential construction-related odor impacts are localized and temporary, they would not adversely affect a substantial number of people. Therefore, the project's potential construction-related odor impacts are less than significant.

California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed November 2023).



Once operational, the proposed project would include truck activity, which could result in diesel odor impacts. The closest sensitive receptor includes the single-family residence located adjacent to the eastern border of the project site along Huntsman Avenue. This residence would be located approximately 220 feet south of truck parking. These odor emissions may be noticeable from time to time near the project site; however, they would be localized and are not likely to adversely affect a substantial number of people by resulting in confirmed odor complaints. In addition, idling of trucks would be limited by the CARB's In-Use Off-Road Diesel Vehicles regulation, which limits idling to 5 minutes or less. Minimizing idling time reduces odors, as unburned fuel and products of combustion from some engines condense in the exhaust, particularly during warmup or shortly after engine startup, resulting in more intense odors. Therefore, the proposed project would result in a less than significant impact related to other emissions (such as those leading to odors) adversely affecting a substantial number of people.

United States Environmental Protection Agency (EPA). 1971. *Guide to Reduction of Smoke and Odor from Diesel-Powered Vehicles*. September. Website: https://nepis.epa.gov/Exe/ZyPDF.cgi/9100JLQ0.PDF? Dockey=9100JLQ0.PDF (accessed October 2023).

## 3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		$\boxtimes$		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		$\boxtimes$		
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	or $\square$	$\boxtimes$		
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			$\boxtimes$	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, other approved local, regional, or state habitat conservation plan?				

#### 3.4.1 Impact Analysis

LSA conducted a Biological Resources Assessment (BRA)<sup>12</sup> to assess potential impacts of the proposed project on biological resources. The following summarizes the resources and methods used to assess the project site, and findings of the BRA.

# 3.4.1.1 Environmental Setting

The project site is located along the eastern portion of the San Joaquin Valley floor in Fresno County. The project site is relatively flat with little topographic variation and is at approximately 347 feet above mean sea level in elevation. Travers Creek and its associated disturbed riparian habitat are located within the project site to the west and north. There are no other drainage features, depressional wetlands, or riparian areas present in the project site or immediate surroundings. The project site is currently an active orchard and contains two agricultural support buildings and one single-family residence. According to historic aerial imagery, the project site has remained in its

LSA Associates, Inc. 2023. *Biological Resources Assessment for the East Huntsman Avenue Industrial Park Project in Reedley, Fresno County, California*. October 10.

current condition for more than 20 years and has supported agricultural crops since at least the early 1950s. The project site is surrounded by Reedley Sports Park to the north, agricultural uses to the south, rural residential and agricultural uses to the east, and light-industrial uses to the west.

#### 3.4.1.2 Literature Review and Records Search

LSA Biologist Kelly McDonald conducted a literature review and record search on September 6, 2023, to identify the existence and potential for occurrence of sensitive or special-status plant and animal species in the project vicinity. Database records reviewed included the following:

- California Natural Diversity Database Information (CNDDB RareFind 5), which is administered by the California Department of Fish and Wildlife (CDFW), formerly known as the California Department of Fish and Game. This database covers sensitive plant and animal species, as well as sensitive natural communities that occur in California. Records from nine United States Geological Survey (USGS) quadrangles surrounding the project area (Orange Cove North, Wahtoke, Sanger, Monson, Orange Cove South, Burris Park, Reedley, Traver, and Selma), along with a query of records within a 5-mile radius of the project site, were obtained from this database to inform the field survey.
- California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants, which uses four specific categories or "lists" of sensitive plant species to assist with the conservation of rare or endangered botanical resources. Records from the nine USGS quadrangles surrounding the project site were obtained from this database to inform the field survey.
- United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) Online System, which lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists all designated critical habitats, national wildlife refuges, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC Trust Resource Report<sup>13</sup> was generated for the project site.
- Designated and Proposed USFWS Critical Habitat Polygons were reviewed to determine whether critical habitat has been designated or proposed within or in the vicinity of the project site.<sup>14</sup>
- The USFWS National Wetlands Inventory was reviewed to determine whether any wetlands or surface waters of the United States have been previously identified in the survey area. 15

United States Fish and Wildlife Service (USFWS). 2023a. Environmental Conservation Online System (ECOS). Information for Planning and Conservation (IPaC) Trust Resources Report. September 2023. Website: http://ecos.fws.gov/ecp/ (accessed September 2023).

United States Fish and Wildlife Service (USFWS). 2023b. USFWS Critical Habitat Polygons. Website: http://ecos.fws.gov/crithab/ (accessed September 2023).

United States Fish and Wildlife Service (USFWS). 2023c. USFWS National Wetlands Inventory (NWI), Online Mapper Tool. Website: https://www.fws.gov/wetlands/data/mapper.html (October 2023).

eBird: eBird is a real-time, online checklist program launched in 2002 by the Cornell Lab of
Ornithology and National Audubon Society. It provides rich data sources for basic information
on bird abundance and distribution at a variety of spatial and temporal scales. eBird occurrence
records within the project sites and a 5-mile radius around the project site were reviewed in July
2023.<sup>16</sup>

In addition to the databases listed above, historic and current aerial imagery, and local land use policies related to biological resources were reviewed, including City of Reedley General Plan Policies COSP4.13.1 through COSP4.13.20 which relate to protection and conservation of sensitive and special-status habitats and species in the City's Planning Area.

#### 3.4.1.3 Field Survey

A general biological survey of the project site was conducted by LSA Biologist Kelly McDonald on September 8, 2023. The project site was surveyed on foot, and all biological resources observed were noted and mapped.

#### **3.4.1.4** Findings

The project site consists of a flat area that contains an active orchard and is developed with two agricultural buildings and one single-family residence. Other areas within the project site consist of disturbed/barren areas surrounding the perimeter of the orchard, ornamental vegetation, and disturbed riparian habitat associated with Travers Creek. The vegetation existing on the site is regularly maintained and much of the soil and vegetation within the project site is disturbed from longstanding agricultural practices. No native or special-status vegetation communities exist in the project site.

Disturbed riparian habitat is present along the banks of Travers Creek and outside of the project site. There are no depressional wetlands (e.g., vernal pools) or other natural drainage features within the project site. The project site does not serve as a wildlife nursery or as a wildlife migration corridor.

A total of 12 wildlife species were observed on or near the project site during the September 2023 survey, including rock pigeon (*Columba livia*; nonnative species), mourning dove (*Zenaida macroura*), red-shouldered hawk (*Buteo lineatus*), California scrub jay (*Aphelocoma californica*), killdeer (*Charadrius vociferus*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), northern flicker (*Colaptes auratus*), Anna's hummingbird (*Calypte anna*), house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), western fence lizard (*Sceloporus occidentalis*), and California ground squirrel (*Otospermophilus beecheyi*). Each of the wildlife species observed commonly occur in and around developed areas throughout the San Joaquin Valley.

The search from CNDDB identified four special-status plant communities, Great Valley Mixed Riparian Forest, Northern Claypan Vernal Pool, Northern Hardpan Vernal Pool, and Valley Sacaton

eBird. 2023. eBird: An online database of bird distribution and abundance. Ithaca, New York: Cornell Lab of Ornithology. Website: http://www.ebird.org (accessed September 2023).

Grassland, that are known to occur within a nine-quad area surrounding the project; however, these habitat types do not occur within the project site or in the project vicinity.

The literature review also identified 20 special-status plant species that are known to occur within a nine-quad area surrounding the project. However, the majority of the rare plant species that were identified in the databases have specialized habitat requirements (e.g., they occur on predominantly alkaline soils, vernal pools, or wetland habitats) that do not occur within the project site. Additionally, due to longstanding agricultural practices in the project site, no special-status plant species are expected to occur within the project site or in adjacent or nearby parcels.

There are no known occurrences of any special-status animal species in the project site, and none were observed during the September 2023 field survey. Nonetheless, marginally suitable, isolated habitat for several regionally occurring special-status species is present in the project site. Western pond turtle (*Emys marmorata*) has a low potential to occur within the project site due to the presence of Travers Creek, which may provide marginally suitable aquatic habitat for this species. Additionally, Ornamental, disturbed riparian, and orchard areas provide nesting and foraging habitat for raptors or other shrub and tree-nesting species, such as Swainson's hawk, along with suitable nesting habitat for ground-nesting birds or birds that may nest in annual herbaceous cover.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated. The project site is located in the Reedley SOI. The project site is currently vacant and used for growing agricultural crops. The project site is surrounded by agricultural uses and Reedley Sports Park to the north, agricultural uses to the south, rural residential and agricultural uses to the east, and light industrial uses to the west. Travers Creek bounds the project site to the west and north. The project site does not contain critical habitat that could support candidate, sensitive or special-status species. Furthermore, no special-status species have been identified within the project site or in the vicinity of the site. However, the project site is located directly adjacent to Travers Creek, which presents marginally suitable aquatic habitat for western pond turtle. The proposed project would maintain the 25-foot-wide easements that exist along both sides of Travers Creek, and therefore, would not remove or impact the suitable aquatic habitat for western pond turtle along Travers Creek.

Due to the historic degradation of the upland areas, the agricultural setting, and the extent of disturbance, its unlikely western pond turtle would nest within the upland areas of the project site; however, should western pond turtle occur within the aquatic and upland area of the project site, individuals of these species could be exposed to direct impacts such as injury or mortality during ground and vegetation disturbance, or indirect impacts such as noise and vibration which could affect movement, breeding, foraging, or sheltering behaviors. Therefore, Mitigation Measures BIO-1, BIO-2, and BIO-3, which require a worker environmental awareness program, preconstruction surveys, construction monitoring and reporting, and delineation of the project site, would be implemented to avoid or minimize impacts to western pond turtles to less than significant.

Additionally, the ornamental, disturbed riparian, and orchard areas within the project site would provide nesting and foraging habitat for raptors or other shrub and tree-nesting species, such as Swainson's hawk, along with suitable nesting habitat for ground-nesting birds or birds that may nest in annual herbaceous cover. To ensure compliance with the federal Migratory Bird Treaty Act and California Fish and Game Code Sections 3500–3516, Mitigation Measure BIO-4, which requires preconstruction nesting bird surveys prior to any vegetation clearing planned to take place during the nesting bird season (January 1 through September 30), would be implemented. Additionally, Mitigation Measures BIO-5 and BIO-6 would be implemented to avoid, minimize, and/or compensate impacts to Swainson's hawk. Finally, Mitigation Measure BIO-7 would ensure implementation of construction best management practices to avoid or minimize construction related impacts on special-status species as a result of dust, potential fuel/fluid spills from construction equipment, construction-related runoff, or erosion. With implementation of Mitigation Measures BIO-1 through BIO-7, impacts to special-status species would be reduced to a less than significant level.

## Mitigation Measure BIO-1

Worker Environmental Awareness Program (WEAP). Prior to any ground disturbance or construction activities, a qualified biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the western pond turtle and nesting birds, the specific measures that are being implemented to avoid adverse effects to biological and aquatic resources, and the boundaries of the project site. The training shall explain local, State, and federal regulations/authorizations pertaining to biological and aquatic resources that are/may be applicable to the project, as well as all measures related to biological and aquatic resources that must be implemented during construction.

## **Mitigation Measure BIO-2**

Preconstruction Surveys, Construction Monitoring, and Reporting. Within 3 days prior to initiation of vegetation removal, a qualified biologist shall conduct a preconstruction survey to ascertain the presence or absence of special-status wildlife species. A qualified biological monitor shall be present during all vegetation clearing activities (including initial ground disturbance) and ground disturbance to ensure avoidance or relocation of special status species, when feasible.

When avoidance or relocation is not feasible, the qualified biologist shall establish a buffer, which would be avoided until the qualified biologist determines that work can proceed. The qualified biologist shall receive approvals from the resource agencies prior to handling any special-status wildlife species. If a federally and/or State-listed or fully-protected species is observed within the project site, work activities with potential to directly or indirectly disturb the plant or animal (as determined by the qualified biologist) shall not take place



until the appropriate regulatory agency (California Department of Fish and Wildlife [CDFW] and/or United States Fish and Wildlife Service [USFWS]) has authorized the work to proceed.

The results of all pre-construction surveys and compliance monitoring shall be documented and reported to the City of Reedley by the qualified biologist and the documentation shall be available upon request throughout the duration of construction activities.

## **Mitigation Measure BIO-3**

**Project Site Delineation.** Prior to the start of construction, the contractor shall clearly delineate (subject to the approval of the qualified biologist) the work areas (e.g., t-posts and 0.25-inch yellow nylon rope and temporary signage) to ensure that no work takes place outside the approved limits of disturbance.

## **Mitigation Measure BIO-4**

Nesting Bird Surveys and Avoidance. If vegetation trimming/ removal, construction, or grading activities are planned within the active nesting bird season (January 1 through September 30), a qualified biologist will conduct a pre-construction nesting bird survey no more than 14 days prior to the start of such activities. The nesting bird survey shall include the project site and areas immediately adjacent to the site that could potentially be affected by project-related activities such as noise, vibration, increased human activity, and dust, etc. For any active nest(s) identified, the qualified biologist will establish an appropriate buffer zone around the active nest(s). The appropriate buffer will be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Land use changes and human activity will be avoided within the buffer zone until the nest is deemed no longer active by the qualified biologist.

#### **Mitigation Measure BIO-5**

Conduct Surveys for Swainson's Hawk Nests and Implement Avoidance and Minimization Measures. Surveys must be performed within 1 year prior to the commencement of construction or grading activities. The qualified biologist will conduct surveys for Swainson's hawk (*Buteo swainsoni*) during the nesting season (March through August) within the project site and a 0.5-mile buffer surrounding the project site, provided access to such areas is available. No sooner than 30 days prior to any ground disturbing activity, the qualified biologist will conduct preconstruction surveys of nests identified during the earlier surveys to determine if any are occupied. The initial nesting season surveys and subsequent pre-construction nest surveys will follow the protocols set out in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000) or guidance

current at the time of project implementation. Available database records will used to support the survey.

Any active Swainson's hawk nests (defined as a nest used one or more times in the last 5 years) found within 0.5 mile of the project site during the nesting season (February 1 to August 31) will be monitored daily by the qualified biologist to assess whether the nest is occupied. If the nest is occupied, the qualified biologist will establish no-work buffers following CDFW Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California, and the status of the nest will be monitored until the young fledge or for the length of construction activities, whichever occurs first. Adjustments to the buffer(s) may be possible in some situations, through consultation with the CDFW.

If an occupied Swainson's hawk nest site is to be removed, an incidental take permit under the California Endangered Species Act (CESA) will be obtained and impacts will be minimized through permitting with CDFW and will be fully mitigated.

## **Mitigation Measure BIO-6**

Compensatory Mitigation for Swainson's Hawk. If Swainson's hawk nests are observed during surveys and impacts cannot be avoided as specified in Measure BIO-5, the Applicant shall provide project-specific compensatory mitigation that replaces affected nest sites and/or provides suitable foraging habitat (for impacts to suitable foraging habitat within 0.5 mile of any nest). Lands proposed as compensatory mitigation for Swainson's hawk must meet the following minimum criteria unless otherwise covered under other project measures or permits, or specifically approved by CDFW:

- Support at least three mature native trees suitable for Swainson's hawk nesting (e.g., Valley oak, Fremont cottonwood, willow, mesquite) for each Swainson's hawk nest tree removed by project construction.
- Support at least one Swainson's hawk nesting territory in the last 5 years.
- Contribute to the project's mitigation commitment for Swainson's hawk foraging habitat, which would be calculated based on the following ratios:
  - 1:1 for impacts on Active Primary Foraging Habitat.
  - 0.75:1 for impacts on Active Secondary Foraging Habitat.
  - 0.5:1 for impacts on Active Tertiary Foraging Habitat.

## **Mitigation Measure BIO-7**

## **Construction Site Housekeeping and Operational Requirements.**

The following measures will be implemented to avoid or minimize impacts on special-status species and general wildlife:

- All excavated, steep-walled holes or trenches more than 6 inches deep shall be covered at the close of each working day with plywood or similar materials. If the trenches or holes cannot be closed, one or more escape ramps constructed of earth fill or wooden planks shall be installed. Any such features that are left open overnight will be searched each day prior to construction activities to ensure no animals are trapped. Work will not continue until trapped animals have moved out of open trenches or have been relocated out of the work area.
- No monofilament plastic (e.g., straw roll netting) will be used for erosion control.
- All work will be completed during daytime hours. All project activity must terminate 30 minutes before sunset and must not start until 30 minutes after sunrise. Sunrise and sunset times are established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area where the project is located.
- All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for wildlife before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a listed species is discovered inside a pipe, that section of pipe shall not be moved until USFWS and/or CDFW has been consulted. If necessary, and under the direct supervision of a qualified biologist, the pipe may be moved only once to remove it from the path of construction activity, until the listed species has escaped. In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape, or the USFWS and CDFW shall be contacted for further guidance.
- Work crews or the qualified biologist will inspect open trenches, pits, and under construction equipment and material left onsite in the morning and evening to look for wildlife that may have become trapped or are seeking refuge.
- All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers

and removed at least once a week from a construction or project site.

- Pets, such as dogs or cats, shall not be permitted on the project site.
- Use of rodenticides and herbicides in project site shall be restricted. This is necessary to prevent primary or secondary poisoning of native predators and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the United States Environmental Protection Agency (EPA), California Department of Food and Agriculture, and other State and federal legislation. If rodent control must be conducted, zinc phosphide shall be used.
- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. Habitat values of the project site have been severely diminished due to periodic site disturbance associated with longstanding agricultural activities on the site. As such, although the CNDDB search for the project identified occurrences of four special-status natural (i.e., plant) communities, Great Valley Mixed Riparian Forest, Northern Claypan Vernal Pool, Northern Hardpan Vernal Pool, and Valley Sacaton Grassland, within the nine-quad search area for the project, these habitat types do not occur within the project site or in the immediate vicinity. Additionally, although disturbed riparian vegetation exists along Travers Creek, which bounds the project site to the west and north, the project would maintain the 25-foot-wide easements that exist along both sides of Travers Creek, and no project improvements that could impact disturbed riparian vegetation would occur in this area. Therefore, implementation of the proposed project would have a less than significant impact related to a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant with Mitigation Incorporated. As previously discussed, Travers Creek and associated disturbed riparian vegetation bounds the project site to the west and north. Based on project design plans, improvements to the project site would be entirely outside of any jurisdictional areas associated with Travers Creek (including disturbed riparian habitat), and no new encroachment or fill is expected to impact resources associated with the Travers Creek. Furthermore, the project would maintain the 25-foot-wide easements that exist along both sides of Travers Creek.



However, due to the proximity of the Travers Creek to the project site, construction activities within the project site could result in indirect temporary impacts such as dust, potential fuel/fluid spills from construction equipment, construction-related runoff, and erosion, which could potentially enter Travers Creek. Construction activities involving ground disturbance could also result in the introduction and/or proliferation of nonnative, invasive plant species, which could further outcompete and/or displace the limited native vegetation within the Travers Creek or adjacent riparian habitat areas. As such, implementation of Mitigation Measure BIO-8, which requires implementation of erosion control methods and proper storage of construction equipment, and Mitigation Measure BIO-9, which addresses the potential spread of invasive plant species, would be required to reduce potential impacts to Travers Creek to a less than significant level. Therefore, with implementation of Mitigation Measures BIO-8 and BIO-9, the project would result in less than significant impacts to state or federally protected wetlands.

#### **Mitigation Measure BIO-8**

**Erosion Control and Best Management Practices.** Prior to the start of construction, the project contractor shall clearly delineate all construction areas and equipment staging areas. The designated areas shall be located in such a manner as to prevent any loose soil or spill runoff from entering Travers Creek. All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities used by the Project Contractor shall take place in these designated staging areas.

Adequate erosion and sedimentation barriers (e.g., silt fencing) shall be installed around the perimeters of work area by the Project Contractor and remain in place during project construction to prevent any sediment or debris from entering Travers Creek. For work areas adjacent to Travers Creek, barriers shall consist of a minimum 3-foot-tall silt fencing buried to a depth of approximately 6 inches below the soil surface (or as otherwise specified in a project-specific erosion control or spill prevention plan). These barriers shall be inspected by the Project Contractor on a regular basis and maintained and repaired as necessary to ensure that there are no holes or tears that could entrap and pose a hazard to wildlife. This fencing used to delineate the work area will also serve as a temporary barrier to minimize the potential for special-status species to enter work areas during construction and/or become trapped within the fenced project site.

## **Mitigation Measure BIO-9**

**Invasive Species Control.** Any nonnative plants removed during the course of construction shall be contained and properly disposed of offsite. All mulch, topsoil, seed mixes, or other plantings used for erosion-control shall be free of invasive plant species seeds or propagules. No plant species listed on the California Invasive Plant Council (Cal-IPC) inventory shall be installed in the project site, and

all plant palettes proposed to be installed on the project site(s) shall be reviewed and approved by a qualified biologist.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant with Mitigation Incorporated. The project site would not place any barriers within any known wildlife movement corridors or interfere with habitat connectivity, and no mitigation related to wildlife movement is required. However, the ornamental, disturbed riparian, and orchard areas within and near the project site could provide nesting habitat for species protected by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3500–3516, including raptors or other shrub and tree-nesting species, such as Swainson's hawk, and ground-nesting birds or birds that may nest in annual herbaceous cover. As previously discussed, Mitigation Measure BIO-4, which requires pre-construction nesting bird surveys prior to any vegetation clearing planned to take place during the nesting bird season (January 1 through September 30), would address potential impacts to nesting birds associated with project development. As such, the proposed project would have a less than significant impact related to substantially interfering with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impeding the use of native wildlife nursery sites.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. As described in the BRA, the project would not conflict with any local policies or ordinances protecting biological resources. Though the proposed project is subject to local policies from the General Plan for the City of Reedley and the Fresno County General Plan related to biological resources, the project would comply with applicable requirements from local policies and ordinances. As such, the proposed project would not conflict with any of the existing ordinances and impacts would be less than significant.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**No Impact.** The Pacific Gas & Electric (PG&E) San Joaquin Valley Operation and Maintenance (O&M) Habitat Conservation Plan (HCP) was approved in 2007 and covers portions of nine counties, including Fresno County. This HCP covers PG&E activities which occur as a result of ongoing O&M that would have an adverse impact on any of the 65 covered species and provides incidental take coverage from the USFWS and CDFW. The Reedley Planning Area is not located within the boundaries of any approved or draft HCP, Natural Community Conservation Plan (NCCP), or other adopted local, regional or State HCP.

Therefore, the project would not conflict with the provisions of the PG&E O&M HCP, or any other an adopted HCP or NCCP and the proposed project would have no impact.

#### 3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
<ul> <li>a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?</li> </ul>		$\boxtimes$		
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		$\boxtimes$		
c. Disturb any human remains, including those interred outside of formal cemeteries?				

## 3.5.1 Impact Analysis

Peak & Associates, Inc. prepared a Cultural Resource Assessment <sup>17</sup> for the proposed project to assess potential impacts to cultural resources. The following impact discussion summarizes the study and results.

#### 3.5.1.1 Records Search

A record search was conducted for the project site by the Southern San Joaquin Valley Information Center on August 7, 2023 (SSJVIC No. 23-313). No portion of the project site has ever been surveyed for cultural resources. Four surveys have been completed to the west of the project site, located completely or partially within the 0.25-mile record search radius, with no cultural resources located. Furthermore, no known cultural sites were found within the project site. The only resource within a 0.25 radius of the project site is P-10-004675, the route of the Atchinson, Topeka and Santa Fe Railroad (later the Burlington Northern Santa Fe Railroad).

#### 3.5.1.2 Field Survey

A field survey of the project site was conducted on October 14, 2023, by Peak & Associates, Inc. Archeological Field Director Michael Lawson. The project site has been leveled for agriculture, and is currently a peach orchard. The western and southern boundaries of the parcel are a channelized drainage, approximately 15 to 20 feet wide, 8 to 10 feet deep with a 4- to 5-foot water depth, identified as Travers Creek on older topographic maps.

Due to the natural water source adjacent to the project site, an intensive, complete survey was conducted within 150 feet of the current channelized ditch/drainage. Outside the 150-foot intensive survey area, a general survey was conducted. For the intensive survey area, parallel transects of 2 to 5 meters apart were used to ensure adequate inspection. Parallel transects of 10 to 20 meters were used in the remainder of the project site.

Although review of historic maps show a structure located in the southeast corner of the project parcel, this building is not currently present on the project site. Intensive survey within a 50-foot

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Peak & Associates, Inc. 2023. Cultural Resource Assessment for the East Huntsman Industrial Park Project, City of Reedley, California. October 27.

radius of the prior building site only revealed fragments of household items such as milk and aqua glass shards and three to four small brick fragments. Results for the survey were negative for prehistoric period or historic cultural resources, artifacts, or other cultural features or remains.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less Than Significant with Mitigation Incorporated. A historical resource defined by CEQA includes one or more of the following criteria: (1) the resource is listed, or found eligible for listing in, the California Register of Historical Resources (California Register); (2) listed in a local register of historical resources as defined by Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resources survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by the project's lead agency (PRC Section 21084.1; State CEQA Guidelines Section 15064.(a)). Under CEQA, historical resources include built-environment resources and archaeological sites.

No historical resources have been identified in the project site. However, there is the possibility of the presence of unknown historical resources onsite that may be obscured by vegetation or fill, leaving no surface evidence. As such, to reduce potential impacts on potentially undiscovered historical resources in the project site, Mitigation Measure CUL-1 shall be implemented. This mitigation measure would reduce potential impacts to undiscovered resources to a less than significant level by requiring the presence of a cultural resources monitor during project construction, and consulting with a qualified historical resources specialist and implementing applicable mitigation measures to protect resources found during project construction.

#### Mitigation Measure CUL-1

As recommended by the Santa Rosa Rancheria Tachi-Yokut Tribe, a cultural resources monitor or archaeologist shall be present during ground disturbing activities on the project site associated with project construction.

If previously unknown resources are encountered before or during grading activities, construction shall stop within 100 feet of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study.

The qualified historical resources specialist shall make recommendations to the City of Reedley on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the State CEQA Guidelines.

If the resources are determined to be unique archeological resources as defined under Section 15064.5(c)(1) of the *State CEQA Guidelines*, measures shall be identified by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology and recommended to the Lead Agency.

Appropriate measures for significant resources could include avoidance or capping, incorporation of green space, parks, or open space in undeveloped areas of the project site, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the protection measures. Any historical artifacts recovered as a result of mitigation shall be provided to a Lead Agency-approved institution or person who is capable of providing long-term preservation to allow future scientific study. A report of findings shall also be submitted to the Southern San Joaquin Valley Information Center.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant with Mitigation Incorporated. Pursuant to CEQA Guidelines Section 15064.5(c)(1), "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource..." Those archaeological sites that do not qualify as historical resources shall be assessed to determine if they qualify as "unique archaeological resources" pursuant to California PRC Section 21083.2. Archaeological cultural resources identified during project construction shall be treated by the City in consultation with a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology, and in accordance with Mitigation Measure CUL-1 as identified above in the discussion for a). With implementation of these measures, impacts to archaeological resources would be less than significant.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries?

Less Than Significant with Mitigation Incorporated. Disturbance of human remains interred outside of formal cemeteries would result in a significant impact. If human remains are identified during project construction, Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code shall apply, as appropriate. In addition, the project would comply with Mitigation Measure CUL-2, which requires notifying the County Coroner and other relevant parties in the event that human remains are found during construction of the proposed project. Therefore, adherence to the requirements in Mitigation Measure CUL-2 would reduce potential impacts to unknown human remains to less than significant.

#### Mitigation Measure CUL-2

In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98(a). If the remains are determined to be of Native American

descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendant of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains.

Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the Project Applicant shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the Project Applicant has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The Project Applicant shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.



#### 3.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?			$\boxtimes$	
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

# 3.6.1 Impact Analysis

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

**Less Than Significant Impact.** This analysis evaluates energy consumption for both construction and operation of the proposed project, including diesel fuel use for construction off-road equipment.

<u>Construction-Period Energy Use</u>. The anticipated construction schedule assumes that the proposed project would be built over approximately 12 months. The proposed project would require grading, site preparation, and building activities during construction.

Construction of the proposed project would require energy for the manufacture and transportation of construction materials, preparation of the site for demolition and grading activities, and construction of the residences. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. Construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, the proposed project would result in a less-than-significant impact during project construction.

**Operational Energy Use.** Energy use consumed by the proposed project would be associated with natural gas use, electricity consumption, and fuel used for vehicle and truck trips associated with the project. Energy and natural gas consumption was estimated for the project using default energy intensities by land use type in CalEEMod. Electricity and natural gas usage estimates associated with the proposed project are shown in Table 3.6.A.

In addition, the proposed project would result in energy usage associated with gasoline to fuel project-related trips. Based on the CalEEMod analysis, the proposed project would result in approximately 2,652,707 vehicle miles traveled (VMT) per year. The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles [SUVs]) in the United States has steadily

increased from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2020. <sup>18</sup> The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.0 mpg in 2021. <sup>19</sup> Therefore, based on the default vehicle fleet mix assumed in CalEEMod and using the EPA fuel economy estimates for 2020, the proposed project would result in the consumption of approximately 44,491 gallons of gasoline per year and 24,824 gallons of diesel fuel per year.

**Table 3.6.A: Estimated Annual Energy Use of Proposed Project** 

Electricity Use	Natural Gas Use	Gasoline	Diesel
(kWh per year)	(therms per year)	(gallons per year)	(gallons per year)
8,327,903	140,443	44,491	

Source: Compiled by LSA (October 2023).

kWh = kilowatt-hours

As shown in Table 3.6.A, the estimated potential increased electricity demand associated with the proposed project is 8,327,903 kWh per year. In 2022, California consumed approximately 287,826 gigawatt-hours (GWh) or 287,826,110,475 kilowatt-hours (kWh).<sup>20</sup> Of this total, Fresno County consumed 8,384 GWh or 8,384,408,687 kWh.<sup>21</sup> Therefore, electricity demand associated with the proposed project would be approximately 0.10 percent of Fresno County's total electricity demand.

The estimated potential increased natural gas demand associated with the proposed project is 140,443 therms per year, as shown in Table 4.F. In 2022, California consumed approximately 11,711 million therms or 11,710,641,194 therms, while Fresno County consumed approximately 319 million therms or approximately 319,435,645 therms. <sup>22</sup> Therefore, natural gas demand associated with the proposed project would be approximately 0.04 percent of Fresno County's total natural gas demand.

In addition, the proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. As shown above in Table 3.6.A, vehicle trips associated with the proposed project would consume approximately 44,491 gallons of gasoline per year and 24,824 gallons of diesel fuel per year. Based on fuel consumption obtained from EMFAC2021, approximately 372 million gallons of gasoline and approximately 157.6 million gallons of diesel will be consumed from vehicle trips in Fresno County in 2023. Therefore, gasoline and diesel fuel demand generated by

United States Department of Transportation (USDOT). Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Website: https://www.bts.dot.gov/bts/bts/content/average-fuel-efficiency-us-light-duty-vehicles (accessed October 2023).

California Energy Commission (CEC). 2015. Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026. Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed October 2023).

California Energy Commission (CEC). 2023a. Energy Consumption Data Management Service, Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed October 2023).

<sup>&</sup>lt;sup>21</sup> Ibid.

California Energy Commission (CEC). 2023b. Energy Consumption Data Management Service, Gas Consumption by County. Website: www.ecdms.energy.ca.gov/gasbycounty.aspx (accessed October 2023).

vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in Fresno County. Fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

The proposed project would include solar fixtures and would comply with the latest California Green Building Standards Code (CALGreen Code) building measures and Title 24 standards. In addition, proposed new development would be constructed using energy efficient modern building materials and construction practices, and the proposed project also would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed project would be consistent with typical usage rates for residential and commercial uses.

PG&E is the private utility that would supply the proposed project's electricity services. In 2021, a total of 50 percent of PG&E's delivered electricity came from renewable sources, including solar, wind, geothermal, small hydroelectric, and various forms of bioenergy.<sup>23</sup> PG&E reached California's 2020 renewable energy goal in 2017 and is positioned to meet the State's 60 percent by 2030 renewable energy mandate set forth in Senate Bill (SB) 100. In addition, PG&E plans to continue to provide reliable service to its customers and upgrade its distribution systems as necessary to meet future demand.

Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment use, and transportation.

## b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. In 2002, the Legislature passed Senate Bill (SB) 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the Integrated Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC's 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. As indicated above, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the overall use in Alameda County. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the overall use in Fresno County, and the State's

Pacific Gas & Electric (PG&E). 2021. Exploring Clean Energy Solutions. Website: https://www.pge.com/en\_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions. page?WT.mc\_id=Vanity\_cleanenergy (accessed October 2023).

available energy resources. Therefore, energy impacts at the regional level would be negligible. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's Integrated Energy Policy Report. Additionally, as demonstrated above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy.

## 3.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:	-	•	-	•
<ul> <li>a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</li> <li>i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning</li> </ul>				
Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
<ul><li>ii. Strong seismic ground shaking?</li><li>iii. Seismic-related ground failure, including liquefaction?</li><li>iv. Landslides?</li><li>b. Result in substantial soil erosion or the loss of topsoil?</li></ul>				
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			$\boxtimes$	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			$\boxtimes$	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				$\boxtimes$
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		$\boxtimes$		

# 3.7.1 Impact Analysis

- a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

**Less Than Significant Impact.** Fault ruptures are generally expected to occur along active fault traces that have exhibited signs of recent geological movement (i.e., within the past 11,000 years). Alquist-Priolo Earthquake Fault Zones delineate areas around active faults with potential surface fault rupture hazards that would require specific geological investigations prior to approval of certain kinds of development within the delineated area. The project site is not located within an Alquist-Priolo Earthquake Fault Zone.<sup>24</sup> In addition, no known active or

California Department of Conservation (DOC). 2021. EQ Zapp: California Earthquake Hazards Zone Application. Website: https://www.conservation.ca.gov/cgs/geohazards/eq-zapp (accessed June 2023).

potentially active faults or fault traces are located in the vicinity of the project site. The closest active faults to the project site are the Nunez Fault, located approximately 62.2 miles southwest of the site, and the Independence Fault, located approximately 63.1 miles northeast of the site. Due to the distance of these known faults, no people or structures would be exposed to potential substantial adverse effects, including the risk of loss, injury, or death from the rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. Therefore, potential impacts related to fault rupture would be less than significant.

## ii. Strong seismic ground shaking?

Less Than Significant Impact. The project site is within the Reedley Planning Area, which is within Seismic Zone 3. This area is characterized as having a relatively thin section of sedimentary rock overlying granite. In this zone, the amplification of shaking that would affect low-to-medium rise structures is relatively high.<sup>25</sup> However, there are no known active faults located within the Reedley Planning Area or the immediate vicinity. In addition, compliance with the CBC (Title 24 CCR) would ensure that geotechnical design of the proposed project would minimize or eliminate potential impacts related to strong seismic ground shaking. Therefore, the project would not directly or indirectly cause substantial adverse effects related to strong seismic ground shaking. As such, the proposed project would have a less-than-significant impact.

## iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. During ground shaking, these soils lose strength and acquire "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands that contain a significant amount of fines (silt and clay) may also liquefy. The General Plan EIR identifies that the potential for ground-failure hazards such as subsidence, settlement and liquefaction is considered minimal in the Reedley Planning Area. Furthermore, compliance with the California Building Code would ensure potential impacts associated with seismic-related ground failure would be less than significant.

#### iv. Landslides?

Less Than Significant Impact. Landslides typically occur in areas that experience ground shaking, are typically wet and/or have steep slopes. The project area is generally flat and not located next to any hills. Due to the distance from known active faults, ground shaking potential in the project area is relatively low. The project site is in the vicinity of the Travers Creek, which bounds the project site to the west and north. The project would preserve the 25-foot easements that exist along both sides of the channel and would not construct near the channel bank where the ground is less stable and more prone to landslides. Therefore, the potential for

<sup>&</sup>lt;sup>25</sup> City of Reedley. 2014. General Plan 2030. February 18. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2019/12/Reedley-General-Plan-2030-Adopted-February-18-2014-1.pdf (accessed June 2023).

the proposed project to expose people or structures to risk as a result of landslides would be less than significant.

b. Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Grading and earthmoving during project construction has the potential to result in erosion and loss of topsoil. Exposed soils could be entrained in stormwater runoff and transported off the project site. However, this impact would not be substantial because the project is required to comply with water quality control measures, which include preparation of a Stormwater Pollution Prevention Plan (SWPPP) (refer to Section 3.10, Hydrology and Water Quality). Although designed primarily to protect stormwater quality, the SWPPP would incorporate Best Management Practices (BMPs) to minimize erosion. Additional details regarding the SWPPP are provided in Section 3.10, Hydrology and Water Quality, of this Initial Study. Impacts related to substantial soil erosion or the loss of topsoil would be less than significant. No mitigation is required.

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

**Less Than Significant Impact.** As described in discussion a) in this section, soils on the project site would not be subject to liquefaction, lateral spreading, or landslides. Additionally, the proposed project would be required to conform with the California Building Code, which would reduce risks related to unstable soils. Therefore, the proposed project would have a less than significant impact related to unstable soils.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. The project site contains various soil types, with the majority consisting of Greenfield sandy loam, Hanford sandy loam, Hanford coarse sandy loam and Delhi sand, all soil types with a low shrink-swell potential. Compliance with CBC requirements would ensure the implementation of design features that would reduce potential impacts related to expansive soils to a less than significant level. As such, the risk of expansive soil affecting the proposed project is considered low and would represent a less than significant impact.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

-

Natural Resources Conservation Service (NRCS). n.d. Web Soil Survey. Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed June 2023).

**No Impact.** Wastewater sewage services for the proposed project would be provided by the City of Reedley. The proposed project would connect to proposed wastewater service infrastructure along East Huntsman Avenue. Development of the proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. The Project Applicant would pay applicable service connection fees to connect to the City's public sewer system, as required by Section 8-3-2 of the Reedley Municipal Code. Therefore, the proposed project would have no impact related to septic tanks or alternative wastewater disposal systems.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. Paleontological resources are afforded protection under State CEQA Guidelines, Appendix G. The State CEQA Guidelines indicate that a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site, or a unique geologic feature. PRC Section 5097.5 also specifies that the unauthorized removal or damage of paleontological remains is a misdemeanor. The California Penal Code Section 622.5 also sets penalties for removal or damage of paleontological resources.

The project site is currently vacant and used for growing agricultural crops. As such, there is potential for undiscovered paleontological resources to be discovered in the undeveloped areas of the project site during construction activities. Mitigation Measure GEO-1 would serve to protect the accidental discovery of paleontological resources. As such, a less than significant impact with mitigation would occur.

#### Mitigation Measure GEO-1

If any potentially significant paleontological resources are discovered during grading activities, all construction activities shall stop within 50 feet of the find and a certified professional paleontologist shall provide recommendations and mitigation measures to protect the resource.

If a potentially significant resource is encountered, then the qualified professional paleontologist, the City of Reedley, and the Project Applicant shall arrange for either (1) total avoidance of the resource or (2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the City of Reedley as verification that the provisions for managing unanticipated discoveries have been met.

# LSA

## 3.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:		_		
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
<ul> <li>b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</li> </ul>				

# 3.8.1 Impact Analysis

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact with Mitigation Incorporated. Greenhouse gas (GHG) emissions are present in the atmosphere naturally, and are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. However, over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global climate change. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF<sub>6</sub>)

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime").

The GWP of each gas is measured relative to CO<sub>2</sub>, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat

trapped by one unit mass of CO<sub>2</sub> over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO<sub>2</sub> equivalents" (CO<sub>2</sub>e).

This section discusses the proposed project's potential impacts related to the release of GHG emissions for both construction and project operation.

Construction GHG Emissions. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. Furthermore, CH<sub>4</sub> is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that construction of the proposed project would generate approximately 464.5 metric tons of  $CO_2e$ . Construction GHG emissions were amortized over the life of the project (assumed to be 30 years) and added to the operational emissions. When annualized over the life of the project, amortized construction emissions would be approximately 15.5 metric tons of  $CO_2e$  (MT  $CO_2e$ ) per year.

Operational GHG Emissions. Long-term GHG emissions associated with the proposed project would typically be generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle and truck trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

Emissions estimates for operation of the proposed project were calculated using CalEEMod. Table 3.8.A shows the emissions sources by category. CalEEMod output sheets are included in Appendix A.

**Table 3.8.A: Operational Greenhouse Gas Emissions** 

Emissions Catagoni	Operational Emissions (MT/yr)				
Emissions Category	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO₂e	Percent of Total
	An	nortized Constru	iction Emissions	15.5	-
Operational Emissions					
Mobile Sources – Vehicles and Light Duty Trucks	404.6	<0.1	<0.1	412.4	9
Mobile Sources –Heavy Heavy Duty Trucks	2,353.8	<0.1	0.4	2,468.2	53
Area Sources	5.1	<0.1	<0.1	5.2	0
Energy Sources	1,515.6	0.2	<0.1	1,525.2	32
Water Sources	55.5	2.6	0.1	140.7	3
Waste Sources	38.9	3.9	0.0	136.1	3
		Total Opera	tional Emissions	4,687.8	100.0
		Total A	nnual Emissions	4,703.3	-

Source: Compiled by LSA (October 2023).

Note = Some values may not appear to add up correctly due to rounding.

CH<sub>4</sub> = methane

MT/yr = metric tons per year

 $CO_2$  = carbon dioxide  $N_2O$  = nitrous oxide

CO<sub>2</sub>e = carbon dioxide equivalent

As shown in Table 3.8.A, the proposed project would generate approximately 4,703.3 MT  $CO_2e$  annually. Section 15064.4 of the *State CEQA Guidelines* states that: "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify GHG emissions, or to rely on a qualitative analysis or performance-based standards. In making a determination as to the significance of potential impacts, the lead agency then considers the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting, whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Therefore, consistent with the *State CEQA Guidelines*, Section 15183.5, if a project is consistent with an adopted qualified Greenhouse Gas Reduction Strategy that meets the standards, it can be presumed that the project would not have significant GHG emission impacts.

The City of Reedley's Climate Action Plan (CAP)<sup>27</sup> was adopted in 2015 to reduce local community GHG emissions, consistent with the State objectives set forth in AB 32. The City's CAP was updated in 2020 to identify tools to meet the City's 2020 and future 2030 reduction goals, including the following:

3-45

<sup>&</sup>lt;sup>27</sup> City of Reedley. 2019. *City of Reedley Climate Action Plan*. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2019/12/City-of-Reedley-Climate-Action-Plan.pdf (accessed November 2023).

- Near-Term: Reduce GHG emissions by 15 percent of 2005 levels by 2020.
- Mid-Term: Reduce GHG emissions by 50 percent below 2005 levels by 2030.
- Long-Term: Reduce GHG emissions by 80 percent below 2005 levels by 2050.

The City's CAP meets the requirements for a Qualified Greenhouse Gas Reduction Strategy and is designed to streamline environmental review of future development projects in the city, consistent with *State CEQA Guidelines* Section 15183.5.

According to the City's CAP, the City must reduce GHG emissions by 50 percent to meet the State mandated 2030 near-term emission reduction goal. To attain this GHG reduction goal, the City requires that all proposed projects meet a 20 percent reduction in project-related GHG emissions. Appendix A of the CAP includes a GHG Reduction Compliance Checklist which project applicants must fill out to demonstrate how projects would comply with the 20 percent GHG reduction requirement. Alternative calculations and measures may be used upon approval. In addition, the CAP Reduction Compliance Checklist includes recommended GHG reduction measures and average reductions (in percentage). Table 3.8.B below shows the GHG reduction measures from the CAP GHG Reduction Checklist that the proposed project would incorporate to meet the 20 percent reduction threshold.

Table 3.8.B: Project Compliance with the City's Applicable CAP
GHG Reduction Checklist Measures

GHG Reduction Measure	luction Measure Project Compliance		
Photovoltaic solar energy	The proposed project would include solar fixtures and would		
provides 20-49% of power needs	comply with the latest Title 24 and CALGreen standards. With	17%	
(annual average).	implementation of Mitigation Measure GHG-1, solar fixtures	1,70	
	would provide at least 20 of the project's power needs.		
Energy Star or better rated water	With implementation of Mitigation Measure GHG-1, the proposed	12%	
heater.	project would install an Energy Star or better rated water heater.	1270	
Low flow kitchen faucet	With implementation of Mitigation Measure GHG-1, the proposed	1%	
	project would install low flow kitchen faucets.	170	
Low flow bathroom faucet	With implementation of Mitigation Measure GHG-1, the proposed	1%	
	project would install low flow bathroom faucets.	170	
Low flow toilet	With implementation of Mitigation Measure GHG-1, the proposed	1%	
	project would install low flow toilets.	170	
Drip irrigation or low	With implementation of Mitigation Measure GHG-1, the proposed		
precipitation spray heads	project would install drip irrigation or low precipitation spray	0.20%	
	heads.		
Install EV charging station	The proposed project would comply with the latest Title 24 and	0.11%	
	CALGreen standards, including providing on-site EV charging.	0.1170	
Landscaping for Energy	The proposed project would include approximately 0.75-acre of		
Efficiency: Plant shade trees on a	landscaped areas along the Traver Channel and East Huntsman		
buildings' south side	Avenue frontage. Additionally, each of the proposed 26 lots in the	2%	
	project site would include greenspace as required by the City, and		
	meet Reedley's shading requirements.		
<b>Total Reduction</b>		34.31%	

Source: Compiled by LSA (October 2023).

CALGreen = California Breen Building Standards CAP = Climate Action Plan EV = electric vehicle GHG = greenhouse gas As demonstrated in Table 3.8.B, the proposed project's consistency with many of the CAP GHG reduction measures would be determined by design decisions that are currently not evident from the conceptual plans evaluated for the environmental analysis in this report. Implementation of Mitigation Measure GHG-1 would require the proposed project to include the applicable measures, as identified in the CAP GHG Reduction Checklist.

## Mitigation Measure GHG-1

The project applicant shall incorporate the following specifications into construction plans details and specifications to document implementation and compliance with the following applicable Climate Action Plan (CAP) greenhouse gas (GHG) reduction measures for review by the City of Reedley Community Development Department. Implementation of the following GHG reduction measures is considered to be applicable, feasible, and effective in reducing GHG emissions generated by the project:

- Install photovoltaic solar fixtures that would provide at least 20 percent of the project's power needs.
- Install an Energy Rated or better water heater.
- Install low flow faucets and toilers.
- Install drip irrigation or low precipitation spray heads.

With implementation of Mitigation Measure GHG-1, the proposed project's reduction from the CAP reduction measures would be 34.31 percent, which is higher than the required 20 percent reduction. Therefore, the proposed project would be consistent with the City's CAP. The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment and impacts would be less than significant with mitigation incorporated.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The SJVAPCD has adopted a Climate Change Action Plan (CCAP), which includes suggested best performance standards (BPS) for proposed development projects. However, the SJVAPCD's CCAP was adopted in 2009 and was prepared based on the State's 2020 GHG targets, which are now superseded by State policies (i.e., the 2019 CALGreen Code) and the 2030 GHG targets, established in SB 32. As discussed above, the proposed project is consistent with the City's CAP. In addition, the proposed project was analyzed for consistency with State goals and the Fresno Council of Governments (Fresno COG) Regional Transportation Plan (RTP) below.

**2022 Scoping Plan.** The following discussion evaluates the proposed project for consistency with the goals of Executive Order (EO) B-30-15, SB 32, AB 197, and AB 1279, and the 2022 Scoping Plan.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. CARB released the 2017 Scoping Plan to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 keeps the State on the path toward achieving the 2050 objective of

reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016. AB 1279 was signed in September of 2022, and codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels by 2045 and directs CARB to work with relevant state agencies to achieve these goals.

The 2022 Scoping Plan<sup>28</sup> assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed project would be required to comply with the latest Title 24 standards of the CCR, established by the CEC, regarding energy conservation and green building standards. Therefore, the proposed project would comply with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the proposed project would be required to comply with the latest Title 24 standards of the CCR, which includes a variety of different

California Air Resources Board (CARB). 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. December. Website: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf (accessed November 2023).

measures, including reduction of wastewater and water use. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

Therefore, the proposed project would not conflict with the plans and policies adopted for the purpose of reducing the emissions of GHGs, including the CARB 2022 Scoping Plan, EO B-30-15, SB 32, and AB 1279.

Fresno COG's 2022 Regional Transportation Plan. The Fresno COG's 2022 RTP reflects transportation planning for Fresno County through 2046. The vision, goals, and policies in the 2022 RTP are intended to serve as the foundation for both short and long-term planning and guide implementation activities. The core vision in the 2022 RTP is to create a region of diverse, safe, resilient, and accessible transportation options that improve the quality of life for all residents by fostering sustainability, equity, a vibrant economy, clean air, and healthy communities. The 2022 RTP contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The actions in the 2022 RTP address all transportation modes (highways, local streets and roads, mass transportation, rail, bicycle, aviation facilities and services) and consist of short and long-term activities that address regional transportation needs. While the actions are organized by the five key policy areas, many of them are cross-cutting and support multiple goals and policies. Some actions are intended to support the Sustainable Communities Strategy and reduce GHG emissions directly, while others are focused on the RTP's broader goals. The 2022 RTP does not require that local General Plans, Specific Plans, or zoning be consistent with the 2022 RTP, but provides incentives for consistency for governments and developers.

The proposed project would not interfere with the Fresno COG's ability to achieve the region's GHG reductions. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206 and as such, it would not conflict with the 2022 RTP targets since those targets were established and are applicable on a regional level. The proposed project would include a pistachio processing facility. As such, the proposed project would be consistent with the growth assumptions used in the 2022 RTP. In addition, the proposed project would not include residential uses that would increase population. Therefore, it is anticipated that implementation of the proposed project would not interfere with Fresno COG's ability to implement the regional strategies outlined in the 2022 RTP.

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the 2022 RTP and would be consistent with applicable State plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

## 3.9 HAZARDS AND HAZARDOUS MATERIALS

		Less Than		
	Potentially Significant	Significant with Mitigation	Less Than Significant	No
	Impact	Incorporated	Impact	Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			$\boxtimes$	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			$\boxtimes$	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one- quarter mile of an existing or proposed school?			$\boxtimes$	
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			$\boxtimes$	
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			$\boxtimes$	

## 3.9.1 Impact Analysis

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Construction activities associated with the proposed project would involve the use of limited amounts of potentially hazardous materials, including but not limited to, solvents, paints, fuels, oils, and transmission fluids. However, all materials used during construction would be contained, stored, and handled in compliance with applicable standards and regulations established by the California Department of Toxic Substances Control (DTSC), the EPA, and the Occupational Safety and Health Administration (OSHA).

The proposed project would develop the project site into a light industrial park that would include office, warehouse and retail uses, truck maintenance and truck wash buildings, parking in the form of employee or truck parking stalls, and associated infrastructure and circulation improvements. No uses utilizing large amounts of hazardous materials are anticipated to occur within the project site. Project operation would involve the use of small quantities of commercially available hazardous materials (e.g., paint, cleaning supplies, fuels) that could be potentially hazardous if handled

improperly or ingested. However, these products are not considered acutely hazardous and are not generally considered unsafe. All storage, handling, and disposal of hazardous materials during project construction and operation would comply with applicable standards and regulations, including Fresno County General Plan Policy HS-F.1.

**Policy HS-F.1** The County shall require that facilities that handle hazardous materials or hazardous wastes be designed, constructed, and operated in accordance with applicable hazardous materials and waste management laws and regulations.

As a result, the proposed project would not create significant hazards to the public or environment through the transport, use or disposal of hazardous materials, and a less than significant impact would occur.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. See discussion a) above. The proposed project would not use substantial amounts hazardous materials which release would result in a significant hazard to the public or the environment. Additionally, the proposed project would also comply, as applicable, with DTSC, EPA, and OSHA regulations for the storage, handling, and disposal of hazardous materials. Additionally, the project would comply with local regulations like Fresno County General Plan Policy HS-F.1, included in discussion for a), which requires compliance with local, State and federal standards and procedures for the handling, use, transport and disposal of hazardous materials. As a result, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, and impacts would be less than significant.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. The closest existing schools to the project site are the KC Kids Pre-School, located approximately 0.9 mile from the site, Jefferson Elementary School, located approximately 1 mile from the site, and the Silas Bartsch School, located approximately 0.9 mile from the site. The project site is not located within 0.25 mile of an existing school. As previously discussed, the proposed project would introduce a light industrial park to the project site, which would not result in the use or emission of substantial quantities of hazardous materials that would pose a human or environmental health risk. In addition, all hazardous materials within the project site would be handled, stored, and disposed of in accordance with applicable standards and regulations. Therefore, because the proposed project would not result in the emission of hazardous materials or acutely hazardous substances, the impact would be less than significant.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

**No Impact.** According to the DTSC EnviroStor database, <sup>29</sup> the project site is not located on a federal superfund site, State response site, voluntary cleanup site, school cleanup site, evaluation site, school investigation site, military evaluation site, tiered permit site, or corrective action site. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.<sup>30</sup> As a result, the proposed project would not create a significant hazard to the public or the environment, and there would be no impact.

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less Than Significant Impact. The closest airport is the Reedley Municipal Airport, approximately 5.9 miles northwest of the project site. The nearest medical center helipad to the project site is located at the Kaweah Delta District Hospital in Visalia, located approximately 18.9 miles southeast from the project site. The project site is not located within the airport land use plan for any airport<sup>31</sup>. Additionally, due to the distance between the project site and local airports and helipads, operations at these locations are not expected to pose a safety hazard for people residing in the project site. Therefore, the proposed project would not expose persons to airport-related hazards, and the potential impact would be less than significant.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The California Emergency Services Act requires cities to prepare and maintain an Emergency Plan for natural, manmade, or war-caused emergencies that result in conditions of disaster or in extreme peril to life. The Reedley Fire and Police Departments maintain emergency response and evacuation plans that form part of the City's Emergency Response Plan, established pursuant to Title 5, Chapter 8 of the City's Municipal Code, and are consistent with Fresno County's Emergency Services Plan. Development of the proposed project would be required to comply with applicable City codes and regulations pertaining to emergency response and evacuation plans maintained by the Reedley Fire and Police Departments.

The proposed project would develop the project site into a light industrial park that would include office, warehouse and retail uses, truck maintenance and truck wash buildings, parking in the form

<sup>&</sup>lt;sup>29</sup> California Department of Toxic Substances Control (DTSC). 2023. EnviroStor. Website: http://www.envirostor.dtsc.ca.gov/?surl=kzptd (accessed August 2023).

California Environmental Protection Agency (CalEPA). 2018. Government Code Section 65962.5(a) Hazardous Waste and Substances Site List. Website: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/ (accessed August 2023).

Fresno Council of Governments (Fresno COG). 2018. *Fresno County Airport Land Use Compatibility Plan*. December.

of employee or truck parking stalls, and associated infrastructure and circulation improvements. The proposed project is not expected to block the circulation of emergency response services in the vicinity of the project site or introduce elements that would conflict with the operations of the City's Emergency Plan. During construction of the project, construction vehicles and equipment might obstruct traffic near the project site, but this obstruction would be temporary and would cease when project construction ceases. Therefore, the proposed project would not interfere with emergency response or evacuation plans in Reedley, and this impact would be less than significant.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. Wildland fires occur in geographic areas that contain the types and conditions of vegetation, topography, weather, and structure density susceptible to risks associated with uncontrolled fires that can be started by lightning, improperly managed campfires, cigarettes, sparks from automobiles, and other ignition sources. The project site is located in an area mapped as Local Responsibility Area (LRA) Unzoned, indicating that the area is urbanized and not susceptible to wildland conflagrations, and is not located within a Very High Fire Hazard Severity Zone (VHFHSZ).<sup>32</sup> Therefore, the proposed project would not expose people or structures to a significant loss, injury or death involving wildland fires and the impact would be less than significant.

California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fresno County State Responsibility Area Fire Hazard Severity Zones. Website: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/ (accessed August 2023).

## 3.10 HYDROLOGY AND WATER QUALITY

		Less Than		
	Potentially	Significant with	Less Than	
	Significant Impact	Mitigation Incorporated	Significant Impact	No
Would the project:	ППрасс	ilicorporateu	Шрасс	Impact
a. Violate any water quality standards or waste discharge				
requirements or otherwise substantially degrade surface or groundwater quality?				
b. Substantially decrease groundwater supplies or interfere				
substantially with groundwater recharge such that the project may impede sustainable groundwater management			$\boxtimes$	
of the basin?				
<ul> <li>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious</li> </ul>				
surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;			$\boxtimes$	
<ul> <li>Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or</li> </ul>			$\boxtimes$	
offsite;				
<ul> <li>iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of</li> </ul>			$\boxtimes$	
polluted runoff; or				
iv. Impede or redirect flood flows?	Ш	Ш	$\boxtimes$	
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			$\boxtimes$	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			$\boxtimes$	

## 3.10.1 Impact Analysis

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

**Less Than Significant Impact.** The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) regulate the water quality of surface water and groundwater bodies throughout California. The proposed project is within the jurisdiction of the Central Valley RWQCB.

<u>Construction</u>. Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During project construction, there would be an increased potential to expose soils to wind and water erosion, which could result in temporary minimal increases in sediment load in nearby water bodies like Travers Creek.

The proposed project would disturb an area over one acre, and as such, the project would require coverage under the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWG and 2012-0006-

DWQ, NPDES No. CAS000002) (Construction General Permit [CGP]). Construction activities subject to the CGP includes clearing, grading, and other ground-disturbing activities such as stockpiling or excavation. The CGP requires development and implementation of a SWPPP.

A SWPPP includes features designed to eliminate contact of rainfall and stormwater runoff with sources of pollution that occur on construction sites, the main source being soil erosion resulting from unstabilized soils coming in contact with water and wind. These features are known as BMPs. Common BMPs to limit pollution in stormwater runoff from construction sites include maintaining or creating drainages to convey and direct surface runoff away from bare areas and installing physical barriers such as berms, silt fencing, waddles, straw bales, and gabions. Consistency with the Construction General Permit, including the SWPPP and BMPs, would reduce project construction impacts on water quality to less than significant levels.

<u>Operation</u>. Operation of the proposed project could result in surface water pollution associated with chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and waste that may be spilled or leaked and have the potential to be transported via runoff during periods of heavy precipitation into nearby water bodies.

The City of Reedley operates under the California Regional Water Quality Control Board Central Valley Regional National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4) (Order No. 2013-0001-DWQ, as amended by Order WQ 2016-0069-EXEC; NPDES No. CAS000004). Consistent with the City's MS4 Permit, the project would implement water quality control BMPs consistent with requirements of the City and the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks. Adherence to the City of Reedley's MS4 Permit would reduce the potential for the discharge of pollutants during project operations and impacts associated with the violation of water quality standards or waste discharge requirements would be less than significant.

Additionally, the City of Reedley's Stormwater Management Implementation Plan (SMIP)<sup>33</sup> was prepared in support of the City's application for a Municipal Stormwater (MS4) Permit to the Central Valley RWQCB. The plan includes information on federal, State, and local storm water quality regulations, stormwater quality control strategies and programs to be implemented in Reedley, storm water quality monitoring and assessment, and plan implementation requirements. The project would comply with applicable storm water quality control requirements of the SMIP.

Infiltration of stormwater could have the potential to affect groundwater quality. The majority of the project site would be impervious surface; and therefore, it is not expected that stormwater would infiltrate during project operations. Because stormwater would be collected and diverted to the City's storm drain system, there is not a direct path for pollutants to reach groundwater. Therefore, project operations would not violate groundwater quality standards or waste discharge

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City of Reedley. 2007. Storm Water Management Implementation Plan. Website: https://www.waterboards.ca.gov/water\_issues/programs/stormwater/swmp/reedley\_swmp.pdf (accessed June 2023).

requirements and impacts would be less than significant. Therefore, impacts associated with the proposed project would be less than significant.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The City of Reedley underlies the Kings Subbasin, which is part of the greater San Joaquin Valley Groundwater Basin (Basin). Temporary dewatering from excavations could be necessary during construction. Construction-related dewatering would be temporary and limited to the area of excavations on the project site and would not substantially contribute to depletion of groundwater supplies. Operation of the project would not require groundwater extraction. Following project implementation, there would be an increase in impervious surface area given that the project site would be mostly built out aside from planting areas located on the project site.

An increase in impervious surface area decreases infiltration, which can decrease the amount of water that is able to recharge the aquifer/groundwater. However, the stormwater from the project site would be collected and directed to the City of Reedley's storm drain system, which includes percolation facilities to replenish groundwater supplies in the Basin.

According to the City's 2020 Urban Water Management Plan (UWMP),<sup>34</sup> Reedley's water supply consists exclusively of groundwater. There are seven active domestic water supply wells that provide potable water to Reedley. The City is engaged in groundwater recharge projects and activities to reduce the consumptive use of groundwater. For example, the City currently discharges treated wastewater effluent from the City's Wastewater Treatment Plant (WWTP) into percolation ponds for groundwater recharge. In addition, the City maintains nine stormwater percolation basins that also aid in groundwater recharge through infiltration of runoff collected from developed land uses in Reedley. Thus, the project would not interfere with groundwater recharge and impacts would be less than significant.

Additionally, based on the maximum projected demand for Reedley that is included in the UWMP [i.e., 2,818 acre-feet per year (AFY) in 2045] and projected available water supplies (i.e., 5,067 AFY in 2045), even during multiple dry years, Reedley would have sufficient supply to cover projected demands resulting from development in the city.

Therefore, this project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable management of the Kings Subbasin. The impact would be less than significant.

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City of Reedley. 2021. 2020 Urban Water Management Plan. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2021/12/City\_of\_Reedley\_UWMP\_-\_Public\_Draft-1639427519.pdf (accessed June 2023).

- c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - i. Result in substantial erosion or siltation on- or off-site;

**Less Than Significant Impact.** Construction of the proposed project would result in grading on the site that would expose native soils that could be subject to the effects associated with wind and water erosion unless adequate measures are taken to limit the transport of soils in surface water from the site to downstream locations.

Stormwater collection and disposal, and flood control for Reedley is provided by the City. Stormwater from the project site would be directed through internal through surface and subsurface drainage infrastructure onsite towards proposed stormwater collection and drainage infrastructure along East Huntsman Avenue. Stormwater from the project site would then be redirected towards the City's infiltration facilities.

As discussed previously, the CGP requires preparation of a SWPPP to identify construction BMPs to be implemented as part of the project to reduce impacts to water quality during construction, including those impacts associated with soil erosion and siltation. With compliance with the requirements in the Construction General Permit and implementation of the construction BMPs, construction impacts related to on- or off-site erosion or siltation would be less than significant.

The project would increase the amount of impervious surface, which would increase the volume of runoff during a storm, and which can more effectively transport sediments to receiving waters. At project completion, much of the project site would be impervious surface area and not prone to onsite erosion or siltation because no exposed soil would be present in these areas. The remaining portion of the site would consist of pervious surface area, which would contain landscaping that would minimize onsite erosion and siltation by stabilizing the soil. Additionally, the Project Applicant would establish and maintain existing drainage patterns on the project site. Therefore, the proposed project would not alter the existing drainage pattern of the site or increase the rate or amount of surface runoff in a manner that would result in an impact related to substantial erosion or siltation on- or off-site. Impacts would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less Than Significant Impact. During construction, soil would be disturbed and compacted, and drainage patterns would be temporarily altered, which can increase the volume and velocity of stormwater runoff and increase the potential for localized flooding compared to existing conditions. As discussed above, the CGP requires the preparation of a SWPPP and implementation of construction BMPs to control and direct surface runoff on site. With adherence to the Construction General Permit, construction impacts related to altering the existing drainage pattern of the site or area or increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site would be less than significant.

While the project would permanently increase the impervious surface area in the project site, the project would be required to direct runoff towards proposed drainage infrastructure along East Huntsman Avenue. Proposed storm drain infrastructure onsite and along East Huntsman Avenue would be constructed per City standards and would be compatible with planned stormwater infrastructure outlined in the City's Integrated Master Plan (IMP).<sup>35</sup>

Additionally, the Project Applicant would be required to pay applicable development impact fees, pursuant to Section 10-23-4 of the City's Municipal Code, which would address the cost of construction of public storm drainage facilities.

As such, the runoff from the project site would be able to be safely conveyed through proposed drainage infrastructure along East Huntsman Avenue. Additionally, the project would be required to maintain the existing drainage pattern of the site. Therefore, the project would not increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site and impacts would be considered less than significant.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

## Less Than Significant Impact.

<u>Construction</u>. The proposed project would result in an increase in impervious surfaces given that the project site would be mostly built out aside from planting areas located on the site. However, compliance with pre-existing regulatory requirements, including compliance with the CGP and implementation of a SWPPP, would reduce or eliminate the potential for project construction to cause substantial additional polluted runoff or runoff in excess of existing or planned stormwater drainage systems. Therefore, construction would not result in additional sources of polluted runoff to be discharged to the storm drain system and impacts would be less than significant. No mitigation is required.

**Operations.** As discussed above, the proposed project would result in an increase in impervious surfaces. However, compliance with existing regulatory requirements, including the MS4 Permit, would reduce or eliminate the potential for project operations to cause substantial additional polluted runoff or runoff in excess of existing or planned stormwater drainage systems. Additionally, pursuant to requirements of the Municipal Code, the Project Applicant would be required to pay a development impact fee to fund development of future drainage infrastructure in the City. Therefore, project operations would not result in additional sources of polluted runoff to be discharged to the storm drain system and impacts would be less than significant.

City of Reedley. 2014. Integrated Master Plan for Potable Water, Sanitary Sewer, and Storm Drainage Systems. June. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2020/01/City-of-Reedley-Integrated-Master-Plan-for-Potable-Water-Sanitary-Sewer-and-Storm-Drainage-Systems-June-2014.pdf (accessed August 2023).

## iv. Impede or redirect flood flows?

Less Than Significant Impact. Title 44 of the Code of Federal Regulations (CFR), Part 60 regulations (44CFR60) requires that placement and flood provision structures within a floodplain not result in a cumulative change in the floodplain water surface that exceeds one foot. In addition, the regulations under 44CFR60 do not allow placement of structures within a regulatory floodway unless that placement would not result in any increase in the floodplain water surface elevation, meaning that there is no displacement or redirection of the floodway. The City of Reedley's flood ordinance (Title 12 of the Reedley Municipal Code) also requires that that no displacement of floodwater would result from the flood proofing of a structure within a floodplain or a regulatory floodway. The majority of the project site is not located within the 100-year flood hazard area as mapped by the Federal Emergency Management Agency (FEMA).<sup>36</sup> However, the project site is located adjacent to Travers Creek which is a 100-year flood hazard area (i.e., Zone A). Construction in the vicinity of Travers Creek would be compliant with applicable requirements of the City's flood ordinance, including elevation of proposed structures within Zone A at least 1 foot above the base flood elevation, inclusion of structural components in building design capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy as applicable, and certification by a registered professional engineer or architect to ensure that the standards of the City's flood ordinance are being fulfilled. The Project Applicant would obtain necessary development permits and comply with applicable design and pre- and post-construction inspection requirements. As a result, the impact would be less than significant.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

**Less Than Significant Impact.** Refer to discussion for c) iv above about flood hazards on the project site. Additionally, the project site is not located in tsunami or seiche zones. Refer to discussion a) in Section 3.9, Hazards and Hazardous Materials regarding the use of hazardous materials within the project site. As a result, a less than significant impact would occur related to the release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. No mitigation is required.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**Less Than Significant Impact.** The project falls within Central Valley RWQCB jurisdiction under the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan)<sup>37</sup>. The Basin Plan addresses water quality concerns and identifies water quality objectives within the Tulare Lake Basin. The City's SMIP

<sup>&</sup>lt;sup>36</sup> Federal Emergency Management Agency (FEMA). 2020. FEMA Flood Map Service Center: Search By Address. Website: https://msc.fema.gov/portal/search?AddressQuery#searchresultsanchor (accessed August 2023).

California Regional Water Quality Control Board Central Valley Region. 2018. Water Quality Control Plan for the Tulare Lake Basin. May. Website: https://www.waterboards.ca.gov/centralvalley/water\_issues/basin\_plans/tularelakebp\_201805.pdf (accessed June 2023).

describes all measures which must be implemented by the City and by future development to comply with water quality protection requirements. Additionally, as noted above, the proposed project would be required to adhere to NPDES drainage control requirements during construction and operation as well as to MS4 Permit requirements for stormwater discharge into the municipal system. The project would be required to comply with applicable federal, State and local policies and requirements related to water quality control to ensure Basin Plan goals are not obstructed.

The project is located within the jurisdiction of the Kings River East Groundwater Sustainability Agency (KREGSA), which is the agency responsible for sustainably managing groundwater in their respective defined basins and sub-basins. In 2019, the KREGSA adopted a Groundwater Sustainability Plan (GSP)<sup>38</sup> pursuant to California Water Code Section 10727. Because the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, the proposed project would not conflict with or obstruct implementation of the GSP or any sustainable groundwater management plan. In addition, the project would comply with the City's UWMP goals, which are meant to fulfill groundwater sustainability goals of the GSP for the basin. As a result, the proposed project would not conflict with the Basin Plan, SMIP, or other water quality control plan or the GSP, the UWMP, or other sustainable groundwater management plan. Impacts would be less than significant.

Kings River East Groundwater Sustainability Agency (KREGSA). 2019. Groundwater Sustainability Plan. December 13. Website: https://kingsrivereast.org/gsp/ (accessed August 2023).

## LSA

## 3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?			$\boxtimes$	
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the			$\boxtimes$	
purpose of avoiding or mitigating an environmental effect?	_ <del>_</del>	_ <del>_</del>	_ <del>_</del>	

## 3.11.1 Impact Analysis

a. Would the project physically divide an established community?

**Less Than Significant Impact.** The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas.

The proposed project would develop the approximately 42-acre project site into a 26-lot light industrial park that would include office, warehouse and retail uses, truck maintenance and truck wash buildings, parking in the form of employee or truck parking stalls, and associated infrastructure and circulation improvements. The project site is surrounded by agricultural uses and Reedley Sports Park to the north, agricultural uses to the south, rural residential and agricultural uses to the east, and light industrial uses to the west. The proposed project would not construct features that would divide an established community or remove means of access that would impair mobility in a community. Therefore, the proposed project would have no impact.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. The project site is currently zoned in Fresno County's Exclusive Agriculture (AE-20) District and is designated Agriculture in the Fresno County General Plan. The project would require annexation of the project site into the City of Reedley, after which the site would be pre-zoned to the Light Industrial (ML) District, and the General Plan land use designation would be changed to Light Industrial. An annexation application would be required to be submitted to the Fresno LAFCo. The Project Applicant would also be required to pay required processing fees for the annexation process. After approval of annexation of the project site into the city of Reedley, the proposed project would be consistent with the City's land use plans. Therefore, the proposed project would not conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and the impact would be less than significant.

## 3.12 MINERAL RESOURCES

	Less Than			
	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			$\boxtimes$	
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			$\boxtimes$	

## 3.12.1 Impact Analysis

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less Than Significant Impact. The California Surface Mining and Reclamation Act (SMARA) provides for the evaluation of an area's mineral resources using a system of Mineral Resource Zone (MRZ) classifications that reflect the known or inferred presence and significance of a given mineral resource. The Fresno County General Plan Update Background Report provides information on the location and types of mineral resources located in the County. Figures 7-9, 7-11 and 7-13 in the Background Report<sup>39</sup> show that there are no areas designated MRZ-2 (i.e., areas where significant mineral resources are known or very likely to be found) within the project area. Furthermore, a review of the California Department of Conservation's Mines & Mineral Resource Related Data & Maps<sup>40</sup> indicates that there are no known mineral resources within or in the vicinity of the project site. Therefore, the proposed project would not result in the loss of any known mineral resources, and the impact would be less than significant.

b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

**Less Than Significant Impact.** Please refer to the discussion for a). The proposed project would not result in the loss of availability of any known locally important mineral resource recovery sites. Therefore, the proposed project would have a less-than-significant impact.

County of Fresno. 2000. Fresno County General Plan, Background Report. Website: https://www.fresnocountyca.gov/files/sharedassets/county/vision-files/files/8398-background\_report\_june04.pdf (accessed August 2023).

California Department of Conservation (DOC). n.d. DOC Maps: Mines and Mineral Resources. Website: https://maps.conservation.ca.gov/mineralresources/#datalist (accessed August 2023).



## **3.13 NOISE**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		$\boxtimes$		
<ul><li>b. Generation of excessive groundborne vibration or groundborne noise levels?</li></ul>				
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

## 3.13.1 Impact Analysis

The analysis in this section is based on the Noise and Vibration Impact Analysis<sup>41</sup> prepared for the proposed project, included as Appendix C of this Initial Study.

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant with Mitigation Incorporated. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

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LSA Associates, Inc. 2024. *Noise and Vibration Impact Analysis - East Huntsman Avenue Industrial Park Project, Reedley, California*. January.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level ( $L_{eq}$ ) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the  $L_{eq}$  and Community Noise Equivalent Level (CNEL) or the day-night average noise level ( $L_{dn}$ ) based on A-weighted decibels. CNEL is the time-weighted average noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly  $L_{eq}$  for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours).  $L_{dn}$  is similar to the CNEL scale but without the adjustment for events occurring during relaxation hours. CNEL and  $L_{dn}$  are within 1 dBA of each other and are normally interchangeable. The City uses the CNEL noise scale for long-term traffic noise impact assessment.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, the City of Reedley.

The applicable noise standards governing the project site include the criteria in the California Code of Regulations and the Noise Element of the City's General Plan 2030 (Noise Element).

CALGreen contains mandatory measures for nonresidential building construction in Section 5.507 on Environmental Comfort. These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when nonresidential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, or other noise source. If the development falls within an airport or freeway 65 dBA CNEL noise contour, buildings shall be constructed to provide an interior noise level environment attributable to exterior sources that does not exceed an hourly equivalent level of 50 dBA L<sub>eq</sub> in occupied areas during any hour of operation.

The Noise Element provides the City's goals and policies related to noise, including the land use compatibility guidelines for community exterior noise environments. The City has identified the following goals and policies in the Noise Element:

## Goals.

- NE 6.1A To protect the citizens of the City from potential harmful effect due to exposure to excessive noise.
- NE 6.1B To preserve the tranquility of residential and other noise sensitive areas by preventing noise-producing uses from encroaching upon existing and planned noise sensitive uses.
- NE 6.1C To develop a policy framework necessary to achieve and maintain a healthful noise environment.

## Policies.

- NE 6.1.2: In order to maintain an acceptable noise environment, the following maximum
  acceptable noise levels should be established for various land use designations (see Tables C
  and D).
- NE 6.1.3: Areas subject to a DNL greater than 60 dBA are identified as noise impact zones.
  As part of the special permit process the proposed development project will be required to
  have an acoustical analysis prepared by a license engineer. The report should also include
  practical and reasonable mitigation measures.
- NE 6.1.4: Within noise impact zones, the City will evaluate the noise impact on development proposals. Mitigating measures, including but not limited to the following, may be required:
  - (a) Setbacks, berms, and barriers.
  - (b) Acoustical design of structures.
  - (c) Location of structures.
- NE 6.1.5: Design of all proposed development should incorporate features necessary to minimize adverse noise impacts, while also minimizing effects on surrounding lands uses.

Table 3.13.A: Allowable City-Wide Noise Exposure – Transportation

Location of Measurement	Allowable Transportation Source Noise Exposure		
	Noise Sensitive Land Uses	New Transportation Noise Sources	
Indoor	45 dBA L <sub>dn</sub>	45 dBA L <sub>dn</sub>	
Outdoor	60 dBA L <sub>dn</sub>	60 dBA L <sub>dn</sub>	

Source: City of Reedley (2014).

#### Notes:

dBA = A-weighted decibels

L<sub>dn</sub> = day-night average noise level

<sup>1.</sup> This table is applicable to noise sources created by either new development and/or new transportation projects.

<sup>2.</sup> Based on an evaluation of the existing condition and proposed project, the Community Development Director may allow exterior exposure up to 65 dB L<sub>dn</sub> where practical application of construction practices has been used to mitigate exterior noise exposure.

**Table 3.13.B: Allowable Noise Exposure – Stationary Sources** 

	Allowable Stationary Source Noise Exposure		
	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)	
Hourly L <sub>eq</sub> , dBA	55	50	
Maximum Level, dBA	70	65	

Source: City of Reedley (2014).

#### Notes:

- 1. As determined within outdoor activity areas of existing or planned noise-sensitive uses, if outdoor activity area locations are unknown, the allowable noise exposure shall be determined at the property line of the noise sensitive use.
- 2. Based on an evaluation of the existing condition and proposed project, the Community Development Director may allow exterior exposure up to 65 dB L<sub>dn</sub> where practical application of construction practices has been used to mitigate exterior noise exposure.

dBA = A-weighted decibels

L<sub>eq</sub> = equivalent continuous sound level

The City has set restrictions to control noise impacts associated with the construction of the proposed project. According to the City's General Plan Environmental Impact Report (EIR), construction activity is limited to the acceptable daily construction hours of 7:00 a.m. to 5:00 p.m.

Additionally, although the City does not have daytime construction noise level limits for activities that occur within the specified hours to determine potential California Environmental Quality Act (CEQA) noise impacts, construction noise was assessed using criteria from the *Transit Noise and Vibration Impact Assessment Manual* (FTA Manual). Table 3.13.C shows the Federal Transit Administration's (FTA) Detailed Assessment Construction Noise Criteria based on the composite noise levels per construction phase.

Table 3.13.C: Detailed Assessment Daytime Construction Noise Criteria

Land Use	Daytime 8-hour L <sub>eq</sub> (dBA)
Residential	80
Commercial	85
Industrial	90

Source: Transit Noise and Vibration Impact Assessment Manual (FTA 2018).

dBA = A-weighted decibels

L<sub>eq</sub> = equivalent continuous sound level

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The closest sensitive receptor to the project site include a rural residential dwelling unit within Outlot A of the project site, a residential dwelling unit located approximately 20 feet away from the project site's eastern boundary, and a residential dwelling unit located northeast of the project site, approximately 380 feet away from the project boundary.

Additionally, based on the long-term noise level measurements taken at the two monitoring locations near the project site (LT-1 and LT-2), described in the Noise and Vibration Impact Analysis

prepared for the project (Appendix C), average noise level at the project site is approximately 59.2 dBA.

The following section describes how the short-term construction and long-term operational noise impacts of the proposed project would be less than significant with mitigation.

Short-Term (Construction) Noise Impacts. Two types of short-term noise impacts could occur during the construction of the proposed project: noise generated by construction crew commutes and noise generated during construction phases, which include includes site preparation, grading, building construction, paving, and architectural coating on the project site. The CalEEMod output for the project indicates that the project would result in an additional 642 vehicles, consisting of worker and hauling trips, being added to Huntsman Avenue, the roadway adjacent to the project site. Because the existing traffic volume on Huntsman Avenue is approximately 570, the future construction-related vehicle trips would increase by 3.3 dBA L<sub>dn</sub>. Although a noise level increase greater than 3 dBA would be perceptible to the human ear in an outdoor environment, the L<sub>dn</sub> on Huntsman Avenue would be 54.9 dBA L<sub>dn</sub>, which is below the 60 dBA L<sub>dn</sub> exterior City standard. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

The second type of short-term noise impact is related noise generated from construction activities. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

**Table 3.13.D: Typical Construction Equipment Noise Levels** 

Equipment Description	Acoustical Usage Factor (%) <sup>1</sup>	Maximum Noise Level (L <sub>max</sub> ) at 50 Feet <sup>2</sup>
Auger Drill Rig	20	84
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Paver	50	77
Pickup Truck	40	55
Pneumatic Tools	50	85

**Table 3.13.D: Typical Construction Equipment Noise Levels** 

Equipment Description	Acoustical Usage Factor (%) <sup>1</sup>	Maximum Noise Level (L <sub>max</sub> ) at 50 Feet <sup>2</sup>
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Trencher	50	80
Welder	40	73

Source: FHWA Roadway Construction Noise Model User's Guide, Table 1 (FHWA 2006).

Note: Noise levels reported in this table are rounded to the nearest whole number.

L<sub>max</sub> = maximum instantaneous sound level

Table 3.13.D lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 ft between the equipment and a noise receptor, obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model. With these maximum noise levels for individual equipment, the project construction composite noise levels at a distance of 50 ft were calculated to range from 74 dBA L<sub>eq</sub> to 88 dBA L<sub>eq</sub>, with the highest noise levels occurring during the site preparation and grading phases. composite noise levels.

As noted above, the closest sensitive receptors to the project site include residential uses located east and northeast of the project site.

Table 13.3.E shows the nearest sensitive uses to the project site, their distance from the center of construction activities, and composite noise levels expected during construction. These noise level projections do not consider intervening topography or barriers.

Table 13.3.E Potential Construction Noise Impacts at Nearest Receptor

Receptor (Location)	Composite Noise Level (dBA L <sub>eq</sub> ) at 50 feet <sup>1</sup>	Distance (feet)	Composite Noise Level (dBA L <sub>eq</sub> )
Residences (East)	00	800	64
Residences (Northeast)	88	1,145	61

Source: Compiled by LSA (2023).

dBA = A-weighted decibels

 $L_{\text{eq}}$  = equivalent continuous sound level

Usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.

Maximum noise levels were developed based on Specification 721.560 from the Central Artery/ Tunnel program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
FHWA = Federal Highway Administration

The composite construction noise level represents the site preparation/grading phases, which are expected to result in the greatest noise level as compared to other phases.

While construction noise will vary, it is expected that composite noise levels during construction at the nearest off-site sensitive residential uses to the east would reach an average noise level of 64 dBA L<sub>eq</sub> during daytime hours. These predicted noise levels would only occur when all construction equipment is operating simultaneously and, therefore, are assumed to be rather conservative in nature. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the project area under existing conditions, the noise impacts would no longer occur once project construction is completed.

The proposed project would implement Mitigation Measure NOI-1, which requires compliance with the construction hours specified in the General Plan EIR, which states that construction activities are allowed between the hours of 7:00 a.m. and 5:00 p.m, and with best construction practices that include use of noise attenuation fixtures for construction equipment, and the location of staging areas and stationary construction equipment away from nearby sensitive uses. As it relates to offsite uses, construction-related noise impacts would not exceed the 80 dBA Leq construction noise level criteria, as established by the FTA for residential land uses for the average daily condition as modeled from the center of the project site. Construction would be temporary, and with compliance with Mitigation Measure NOI-1, noise impacts to nearby sensitive receptors would be minimized. As such, impacts would be less than significant with mitigation.

<u>Long-Term Operational Noise Impacts.</u> The following section addresses possible noise level increases in the project vicinity resulting from implementation of the proposed project, including mobile and stationary noise sources. Mobile noise sources include traffic noise. Stationary noise sources include noise associated with heating, ventilation, air conditioning (HVAC) equipment, truck deliveries and loading and unloading activities, and truck maintenance and wash.

 Traffic Noise. The guidelines included in the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77 108) were used to evaluate highway traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry, to compute typical equivalent noise levels during daytime, evening, and nighttime hours.

The without and with project scenario traffic volumes were obtained from the *Traffic Impact Study for East Huntsman Avenue Industrial Park Project*. <sup>42</sup> Specific model assumptions and output sheets can be found in the Noise and Vibration Impact Analysis (Appendix C). The model results show that the increase in project-related traffic noise would be up to 6.5 dBA on Huntsman Avenue. Although the noise level increase is greater than 3 dBA, the L<sub>dn</sub> on Huntsman Avenue would be 53.9 dBA L<sub>dn</sub>, which is below the 60 dBA L<sub>dn</sub> exterior City standard. Therefore, traffic noise impacts from project-related traffic on off-site sensitive receptors would be less than significant and no mitigation measures are required.

• Stationary Operational Noise. To provide a conservative analysis of noise impacts to off-site sensitive land uses from the proposed operational activities, it is assumed that operations would occur equally during all daytime hours of the day and that 4 loading docks would be active at all

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LSA Associates, Inc. 2023. *Traffic Impact Study - East Huntsman Avenue Industrial Park Project, Reedley California*. December.

times. Additionally, it is assumed that within any given hour, 15 heavy trucks would maneuver to park near or back into one of the proposed loading docks. To determine the future noise impacts from project operations to the nearby noise sensitive uses, a 3-D noise model, SoundPLAN, was used to incorporate the site topography as well as the shielding from the proposed buildings, and the proposed 10 ft high wall along the eastern and northeastern property line. Following is a description of stationary noise sources and levels considered in the SoundPLAN analysis.

- Heating, Ventilation, and Air Conditioning Equipment. The project would have various rooftop mechanical equipment, including HVAC units, on the proposed buildings. Based on the project site plan, the project is assumed to have a total of 46 rooftop HVAC units and assumed to operate 24 hours per day. The HVAC equipment could operate 24 hours per day and would generate sound power levels (SPL) of up to 87 dBA SPL or 72 dBA L<sub>eq</sub> at 5 ft, based on manufacturer data (Trane n.d.).
- Truck Deliveries, Truck Loading and Unloading Activities, Truck Maintenance and Truck Wash Operations. Noise levels generated by delivery trucks would be similar to noise readings from truck loading and unloading activities, which generate a noise level of 75 dBA Leq at 20 ft based on measurements taken by LSA (Operational Noise Impact Analysis for Richmond Wholesale Meat Distribution Center<sup>43</sup>). Shorter term noise levels that occur during the docking process taken by LSA were measured to be 76.3 dBA Leq at 20 ft. Delivery trucks would arrive on site and maneuver their trailers so that trailers would be parked within the loading docks. During this process, noise levels are associated with the truck engine noise, air brakes, and back-up alarms while the truck is backing into the dock. These noise levels would occur for a shorter period of time (less than 5 minutes). After a truck enters the loading dock, the doors would be closed, and the remainder of the truck loading activities would be enclosed and therefore much less perceptible. To present a conservative assessment, it is assumed that truck arrivals and departure activities could occur at 15 spaces for a period of less than 5 minutes each and unloading activities could occur at 4 docks simultaneously for a period of more than 30 minutes in a given hour.

<u>Truck Maintenance.</u> The significant sources of noise in the service area include impact wrenches and car lifts.

- Impact wrenches: It is assumed that an impact wrench would operate for a total of 30 minutes per hour. Based on reference information gathered from Dewalt, an impact wrench would produce a noise level of 104 dBA SPL at a distance of 2 feet.
- <u>Drive Ratchets</u>: It is assumed that a drive ratchet would operate for a total of 30 minutes per hour. Based on reference information gathered from Milwaukee, an impact wrench would produce a noise level of 99 dBA SPL at a distance of 2 feet.

LSA Associates, Inc. 2016. Operational Noise Impact Analysis for Richmond Wholesale Meat Distribution Center. May.

- <u>Car lifts</u>: It is assumed that car lifts would operate for a total of 30 minutes in a given hour. Based on reference noise levels measured by LSA, a car lift would produce a noise level of 81.9 dBA SPL at a distance of 3 feet.
- <u>Air Hoses</u>: It is assumed that air hoses would operate for less than 30 minutes in a given hour. Based on reference noise levels by Air Saving Products, an air hose would produce a noise level of 84 dBA SPL at a distance of 3 feet.

<u>Truck Wash.</u> Below are sources at the wash bays of the project.

- Shop Vacuum: It is assumed that the shop vacuum equipment would operate for 30 minutes each hour. Based on reference noise level from a variety of commercially available products, each shop vacuum would produce a noise level of 70 dBA SPL at a distance of 3 feet.
- Water Blaster: It is assumed that the water blaster would operate for 30 minutes each hour. Based on reference noise levels from Tech Gear Lab, the shop vacuum would produce a noise level of 65.1 dBA SPL at a distance of 25 feet.

The SoundPLAN results (See Appendix C) show that the unmitigated project-generated noise levels would exceed the residential use daytime and nighttime noise standards of 55 dBA  $L_{eq}$  and 50 dBA  $L_{eq}$ , respectively, at the sensitive receptors to the east. As such, implementation of Mitigation Measure NOI-2 would be required, which would include the incorporation of a 10-foot sound wall along the eastern and northeastern property line, and would limit dock and heavy truck operations, as well as operations of truck wash and maintenance buildings between the hours of 10 p.m. to 7 a.m. Therefore, with the incorporation of Mitigation Measure NOI-2, the impact would be less than significant.

## Mitigation Measure NOI-1:

The project contractor shall implement the following measures during construction of the project:

- The project would comply with the City's General Plan EIR allowed daily hours of construction between 7:00 a.m. and 5:00 p.m.
- The project construction contractor shall equip all construction equipment, fixed or mobile, with properly operating and maintained noise mufflers consistent with manufacturer's standards.
- The project construction contractor shall locate staging areas away from off-site sensitive uses during the later phases of project development.
- The project construction contractor shall place all stationary construction equipment so that emitted noise is directed away

from sensitive receptors nearest the project site whenever feasible.

## **Mitigation Measure NOI-2:**

The following measures shall be implemented to ensure compliance with the City of Reedley's daytime and nighttime noise standards for residential uses outlined in the City's General Plan.

- A 10-foot sound wall shall be incorporated along the project site's eastern and northeastern property lines.
- No operations at the proposed truck wash or maintenance buildings shall be permitted between the hours of 10 p.m. to 7 a.m.
- No loading dock or heavy truck operations/movements at the buildings on Parcels 21 and 22 shall be permitted between the hours of 10 p.m. to 7 a.m.

## b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Vibration energy propagates from a source, through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as the motion of building surfaces, rattling of items on shelves or hanging on walls, or as a low-frequency rumbling noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of groundborne vibration are construction activities (e.g., pavement breaking and operating heavy-duty earthmoving equipment), and occasional traffic on rough roads. In general, groundborne vibration from standard construction practices is only a potential issue when within 25 feet of sensitive uses. Groundborne vibration levels from construction activities very rarely reach levels that can damage structures; however, these levels are perceptible near the active construction site. With the exception of old buildings built prior to the 1950s or buildings of historic significance, potential structural damage from heavy construction activities rarely occurs. When roadways are smooth, vibration from traffic (even heavy trucks) is rarely perceptible.

Short-Term Construction Vibration Impacts. Construction of the proposed project could result in the generation of groundborne vibration. This construction vibration impact analysis discusses the level of human annoyance using vibration levels in VdB and will assess the potential for building damages using vibration levels in peak particle velocity (PPV) (in/sec) because vibration levels calculated in root-mean-square (RMS) are best for characterizing human response to building

vibration, while vibration level in PPV is best used to characterize potential for damage. The Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment guidelines indicate that a vibration level up to 102 VdB (an equivalent to 0.5 in/sec in PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 in/sec in PPV).

Table 13.3.F shows the PPV and VdB values at 25 ft from the construction vibration source. As shown in Table 13.3.F, bulldozers and other heavy-tracked construction equipment (expected to be used for this project) generate approximately 0.089 PPV in/sec or 87 VdB of ground-borne vibration when measured at 25 ft, based on the FTA Manual. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project construction boundary (assuming the construction equipment would be used at or near the project setback line).

Table 13.3.F: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L <sub>V</sub> at 25 ft		
Equipment	PPV (in/sec)	L <sub>V</sub> (VdB) <sup>1</sup>	
Pile Driver (Impact), Typical	0.644	104	
Pile Driver (Sonic), Typical	0.170	93	
Vibratory Roller	0.210	94	
Hoe Ram	0.089	87	
Large Bulldozer <sup>2</sup>	0.089	87	
Caisson Drilling	0.089	87	
Loaded Trucks <sup>2</sup>	0.076	86	
Jackhammer	0.035	79	
Small Bulldozer	0.003	58	

Source: Transit Noise and Vibration Impact Assessment Manual (FTA 2018).

 $\begin{array}{ll} \mu \text{in/sec} = \text{microinches per second} & L_V = \text{velocity in decibels} \\ \text{ft} = \text{foot/feet} & \text{PPV} = \text{peak particle velocity} \\ \text{FTA} = \text{Federal Transit Administration} & \text{RMS} = \text{root-mean-square} \\ \text{in/sec} = \text{inch/inches per second} & \text{VdB} = \text{vibration velocity decibels} \\ \end{array}$ 

The formulae for vibration transmission are provided below, and Tables 13.3.G and 13.3.H provide a summary of off-site construction vibration levels.

$$L_v$$
dB (D) =  $L_v$ dB (25 ft) - 30 Log (D/25)  
 $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$ 

According to the FTA Manual, the threshold at which vibration levels would result in annoyance would be 78 VdB for daytime residential uses.

<sup>&</sup>lt;sup>1</sup> RMS vibration velocity in decibels (VdB) is 1 μin/sec.

<sup>&</sup>lt;sup>2</sup> Equipment shown in **bold** is expected to be used on site.

# Table 13.3.G: Potential Construction Vibration Annoyance Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (VdB) at 25 ft <sup>1</sup>	Distance (ft) <sup>2</sup>	Vibration Level (VdB)	
Residences (East)	87	800	42	
Residences (Northeast)	0/	1,145	37	

Source: Compiled by LSA (2023).

- The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.
- The reference distance is associated with the average condition, identified by the distance from the center of construction activities to surrounding uses.

ft = foot/feet

VdB = vibration velocity decibels

Table 13.3.H: Potential Construction Vibration Damage Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (PPV) at 25 ft <sup>1</sup>	Distance (ft) <sup>2</sup>	Vibration Level (PPV)	
Residences (East)	0.089	20	0.124	
Residences (Northeast)	0.089	380	0.002	

Source: Compiled by LSA (2023).

- The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.
- The reference distance is associated with the peak condition, identified by the distance from the perimeter of construction activities to surrounding structures.

ft = foot/feet

PPV = peak particle velocity

Based on the information provided in Table 13.3.G, vibration levels are expected to approach 42 VdB at the closest residential uses located east of the project site, which is below the 78 VdB threshold for annoyance.

Based on the information provided in Table 13.3.H, vibration levels are expected to approach 0.124 PPV in/sec at the nearest surrounding off-site structures and would not exceed the 0.2 PPV in/sec damage threshold considered safe for non-engineered timber and masonry buildings. Vibration levels at all other nearby buildings would be lower. Furthermore, because construction activities would be limited to the allowed period between the hours of 7:00 a.m. and 5:00 p.m., vibration impacts would not occur during the more sensitive nighttime hours. Therefore, project construction would not result in any vibration damage, and impacts would be less than significant.

<u>Operational Vibration Impacts</u>. The proposed project would not generate vibration levels related to on-site operations. The streets surrounding the project area are paved, smooth, and unlikely to cause significant groundborne vibration. In addition, the rubber tires and suspension systems of onroad vehicles provide vibration isolation. Based on a reference vibration level of 0.076 in/sec PPV, structures greater than 20 ft from the roadways that contain project trips would experience

vibration levels below the most conservative standard of 0.12 in/sec PPV; therefore, vibration levels generated from project-related traffic on the adjacent roadways would be less than significant, and no mitigation measures are required.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. Airport-related noise levels are primarily associated with aircraft engine noise made while aircraft are taking off, landing, or running their engines while still on the ground. The closest airport to the proposed project site is Reedley Municipal Airport, located approximately 6 miles north of the project site. According to Figure 6.2 of the City's General Plan<sup>44</sup>, the project site is located well outside the 65 dBA CNEL airport noise impact zone. Therefore, the project would not be adversely affected by airport/airfield noise, nor would the project contribute to or result in adverse airport/airfield noise impacts.

City of Reedley. 2014a. General Plan 2030. February 18. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2019/12/Reedley-General-Plan-2030-Adopted-February-18-2014-1.pdf (accessed June 2023).

## 3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			$\boxtimes$	
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			$\boxtimes$	

## 3.14.1 Impact Analysis

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The project site is currently zoned in Fresno County's Exclusive Agriculture (AE-20) District and is designated Agriculture in the Fresno County General Plan. The project would require annexation of the project site into the City of Reedley, after which the site would be pre-zoned to the Light Industrial (ML) District, and the General Plan land use designation would be changed to Light Industrial. The project site currently contains one dwelling unit, which would be preserved with the proposed project. The proposed project would not result in direct population growth as the use proposed is not residential and would not contribute to permanent residency on site. Once operational, the proposed project would employ approximately 555 people.

The 2022 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by the Fresno COG determined that a jurisdiction is considered housing rich if the employment-to-household ratio is less than 1.10 jobs for every household and job rich if the ratio is above 1.30 jobs for every household.<sup>45</sup> The City of Reedley had an employment-to-household ratio of 0.78 in 2020, which indicates that the City is considered "job poor" and employment opportunities within the City's jurisdiction are likely to be occupied by residents of Reedley.<sup>46</sup>

Furthermore, the site has been planned for light industrial development according to the City's General Plan. Therefore, the proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly, and this impact would be considered less than significant. No mitigation is required.

Fresno Council of Governments (Fresno COG). 2022. Draft Program Environmental Impact Report for the 2022 Regional Transportation Plan and Sustainable Communities Strategy. Pg. 3-403. April 15.

Fresno Council of Governments (Fresno COG). 2020. Fresno County 2019-2050 Growth Projections. Website: https://agendas.fresnocog.org/itemAttachments/604/Fresno\_COG\_2019\_2050\_Projections\_Draft\_Report\_101920.pdf (accessed August 2023).



b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**Less Than Significant Impact.** The project site currently contains one dwelling unit, which would be preserved with the proposed project. As such, the proposed project would not displace existing people or housing from the site necessitating the construction of replacement housing elsewhere. Impacts would be less than significant. No mitigation is required.

## 3.15 PUBLIC SERVICES

	Less Than				
	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
Would the project:					
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
i. Fire protection?			$\boxtimes$		
ii. Police protection?			$\boxtimes$		
iii. Schools?			$\boxtimes$		
iv. Parks?			$oxive {oxive oxive {oxive {ox}}}$		
v Other nublic facilities?			$\overline{\boxtimes}$		

## 3.15.1 Impact Analysis

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

#### i. Fire protection?

Less Than Significant Impact. The City of Reedley Fire Department (RFD) would provide fire protection services to the proposed project. The RFD operates out of a station located at 1060 D Street, approximately 1.7 miles northwest from the site. The RFD has three full-time employees, and a volunteer staff of approximately 40 people that are hired on a paid-per-call basis. The typical response time by the RFD is 5 to 8 minutes, although there is no stated policy on standard response times or officer to resident ratios established by the City for the RFD. Planned growth under the General Plan would increase calls for fire protection service in the city. However, the proposed project has been planned for light industrial development under the under the City's General Plan.

The proposed project could result in an incremental increase in the demand for fire protection services. However, the proposed project would be required to comply with all applicable codes for fire safety and emergency access. In addition, the Project Applicant would be required to pay development impact fees pursuant to Section 10-23-4 of the City's Municipal Code to account for the potential impacts to police protection services.

The RFD would continue providing services to the project site and would not require additional firefighters to serve the proposed project. The construction of a new or expanded fire station would not be required. The proposed project would not result in a significant impact on the

physical environment due to the incremental increase in demand for fire protection and life safety services. The incremental increase in demand for services is not expected to adversely affect existing responses times to the site or within Reedley. Therefore, construction and operation of the proposed project would have a less than significant impact on fire protection.

## ii. Police protection?

Less Than Significant Impact. Police protection services in Reedley are provided by the Reedley Police Department (RPD). The RPD operates out of a station located at 843 G Street, approximately 1.97 miles northwest of the site. The RPD Operations Division is staffed by approximately 29 sworn officers: the chief, one lieutenant, seven sergeants, one corporal, 17 patrol officers, and two reserve officers. The RPD also consists of non-sworn staff including one administrative assistant, six dispatchers, five community service officers, and three records specialists. The RPD has a standard response time of three to five minutes. Planned growth under the General Plan would increase calls for police protection service in the city. However, the proposed project has been planned for light industrial development under the under the City's General Plan.

The project could result in an incremental increase in the demand for police protection services. The Project Applicant would be required to pay development impact fees pursuant to Section 10-23-4 of the City's Municipal Code to account for the potential impacts to police protection services.

The RPD would continue to provide services to the project site and would not require additional officers to serve the project site. The construction of new or expanded police facilities would not be required. Therefore, the proposed project would not result in a substantial adverse impact associated with the provision of additional police facilities or services and impacts to police protection would represent a less-than-significant impact.

## iii. Schools?

Less Than Significant Impact. The Kings Canyon Unified School District (KCUSD) provides kindergarten through 12th grade education for the City of Reedley. The KCUSD covers approximately 600 square miles and has a student population of approximately 10,000. The KCUSD operates 19 schools for kindergarten through 12th grade education, as well as programs for adult, alternative, vocational, special education, and an online Leadership Academy. Planned growth under the General Plan would increase demand for school services. The proposed project would not include a residential component that may directly increase demand for school services in the KCUSD. However, the Project Applicant would be required to pay appropriate school developer fees at time of building permits to address potential impacts to KCUSD services, as set forth in Education Code Section 17620, pursuant to Government Code 65995. Therefore, the proposed project would not result in a substantial adverse impact associated with the provision of additional school facilities or services and impacts related to increased demand for school services would represent a less than significant.

## iv. Parks?

Less Than Significant Impact. The City of Reedley operates and manages about 72 acres of developed City-owned parks, trails and facilities. The General Plan EIR identifies that the City has a parkland standard of 4 acres of parkland per 1,000 residents. Planned growth under the General Plan would increase demand for parks in the City. The proposed project consists of a light residential development consistent with planned development outlined by the City's General Plan. Although the project site does not include a residential component, the project could still increase the demand for parks in the vicinity of the site. The Project Applicant would be required to pay applicable development impact fees to address potential impacts to park and recreation facilities pursuant to Section 10-23-4 of the City's Municipal Code at the time building permits are obtained. Therefore, the proposed project would not result in a substantial adverse impact associated with the provision of additional park facilities, and impacts to parks would represent a less-than-significant impact.

## v. Other public facilities?

**Less Than Significant Impact.** Planned growth under the General Plan would increase the demand for public facilities in the City. After approval of annexation of the project site into the City of Reedley, the proposed project would be consistent with planned growth under the City's General Plan.

Development of the proposed project could also increase demand for other public services, including libraries, community centers, and public health care facilities. The Project Applicant would be required to coordinate with the City the payment of applicable impact fees to mitigate impacts to public facilities resulting from the proposed project. As such, the impact would be less than significant.



#### 3.16 RECREATION

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			$\boxtimes$	
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

#### 3.16.1 Impact Analysis

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. The proposed project would develop the approximately 42-acre project site into a 26-lot light industrial park that would include office, warehouse and retail uses, truck maintenance and truck wash buildings, parking in the form of employee or truck parking stalls, and associated infrastructure and circulation improvements. Although the project does not propose residential uses, development of the site could still increase the demand for recreational facilities near the project site. The Project Applicant would be required to pay applicable development impact fees for park and recreation facilities pursuant to Section 10-23-4 of the City's Municipal Code at the time building permits are obtained. The impact fee would serve to offset project impact on existing recreational facilities. Therefore, the impact would be less than significant.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact. The proposed project would develop the approximately 42-acre project site into a 26-lot light industrial park and would not include recreational facilities. The General Plan EIR identifies that Reedley has about 72 acres of developed City-owned parks, trails and other recreational facilities. Given that the project would not generate population growth in the Reedley, it is not anticipated that the project would increase demand for recreational facilities so that the expansion of existing facilities or the construction of additional public recreational facilities would be required. Impacts would be less than significant.

#### 3.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			$\boxtimes$	
<ul><li>b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?</li></ul>			$\boxtimes$	
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			$\boxtimes$	
d. Result in inadequate emergency access?			$\boxtimes$	

#### 3.17.1 Impact Analysis

The following discussion is based on the Traffic Impact Study (TIS)<sup>47</sup> prepared for the proposed project. The TIS is included as Appendix D.

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Less Than Significant Impact.** While levels of service (LOS) analysis is no longer a criteria of significance for traffic impacts under CEQA, the City of Reedley General Plan includes policies that utilize LOS to determine project conditions of approval. As such, this analysis includes LOS impacts while VMT impacts are discussed in Response b) below.

As per the Circulation Element of the City of Reedley General Plan (2030), the City's goal is to maintain LOS C or better. As per the County of Fresno (County) *Draft Guidelines for the Preparation of Traffic Impact Studies within the County of Fresno* (TIS Guidelines), dated May 2018, LOS D is considered as the LOS standard for all intersections and roadway segments under all analysis scenarios within the sphere of influence of the cities of Fresno and Clovis. The LOS standard on all other roadways in the County is LOS C. None of the study intersections and roadway segments are located within the spheres of influence of the cities of Fresno and Clovis. Therefore, for the study area, LOS C have been considered as the applicable LOS standard. The County considers the following operational deficiency criteria for study intersections and roadway segments:

#### • Signalized Intersections:

 If the project causes an intersection that is operating at an acceptable LOS to deteriorate to an unacceptable LOS; OR

LSA Associates, Inc. 2023. *Traffic Impact Study - East Huntsman Avenue Industrial Park Project, Reedley California*. December.

If the project causes the average delay to increase by more than 5.0 seconds at a signalized intersection that is operating at an unacceptable LOS. It is to be noted that a decrease from an unacceptable LOS to a lesser LOS (e.g., from LOS D to LOS E in County areas) is not considered a deficiency unless the corresponding delay increase is greater than 5.0 seconds.

#### Unsignalized Intersections:

- If the project causes a movement or approach that is operating at an acceptable LOS to deteriorate to an unacceptable LOS; OR
- If the project causes the average delay to increase by more than 5.0 seconds on a
  movement or approach that is operating at an unacceptable LOS. It is to be noted that a
  decrease from an unacceptable LOS to a lesser LOS (e.g., from LOS D to LOS E in County
  areas) is not considered a deficiency unless the corresponding delay increase is greater than
  5.0 seconds.

#### Roadway Segments:

- If the project causes a roadway that is operating at an acceptable LOS to deteriorate to an unacceptable LOS; OR
- o If the project causes the volume-to-capacity (v/c) ratio (on a unidirectional peak hour basis) to increase by more than 0.05 on a roadway that is already operating at an unacceptable LOS. It is to be noted that a decrease from an unacceptable LOS to a lesser LOS (e.g., from LOS D to LOS E in County areas) is not considered a deficiency unless the corresponding v/c ratio increase is greater than 0.05.

The TIS examined traffic operations in the vicinity of the proposed project under the following six scenarios:

- Existing conditions
- Existing Plus Project conditions
- Near-term Without Project conditions
- Near-term Plus Project conditions
- Cumulative Without Project conditions
- Cumulative Plus Project conditions

Traffic operations at the study intersections and study roadway segments were analyzed during the weekday AM and PM peak hours. Within the TIS Guidelines, the AM peak hour is defined as the 1 hour of highest traffic volumes occurring between 7:00 a.m. and 9:00 a.m., while the PM peak hour is defined as the 1 hour of highest traffic volumes occurring between 4:00 p.m. and 6:00 p.m. The study area for the TIS included the following study intersections and roadway segments.

#### Study Intersections:

- Buttonwillow Avenue/Dinuba Avenue (Reedley)
- Englehart Avenue/Dinuba Avenue (County of Fresno)
- Buttonwillow Avenue/Huntsman Avenue (Reedley)

- Englehart Avenue/Huntsman Avenue (County of Fresno)
- Project Driveway 1/Huntsman Avenue (County of Fresno)
- Project Driveway 2/Huntsman Avenue (County of Fresno)

#### Roadway Segments:

- Buttonwillow Avenue, between Dinuba Avenue and Huntsman Avenue (City of Reedley)
- Buttonwillow Avenue, between Huntsman Avenue and Reedley City Limit (City of Reedley)
- o Buttonwillow Avenue, between Reedley City Limits and Floral Avenue (Fresno County)
- Englehart Avenue, between Dinuba Avenue and Huntsman Avenue (Fresno County)
- o Englehart Avenue, between Huntsman Avenue and Floral Avenue (Fresno County)
- Dinuba Avenue, between Buttonwillow Avenue and Englehart Avenue (City of Reedley)
- Huntsman Avenue, between Buttonwillow Avenue and the project site (City of Reedley/Fresno County)
- Huntsman Avenue, between project site and Englehart Avenue (Fresno County)

Project Trip Generation. To assess potential impacts that the project may have on the surrounding roadway network, the first step was to determine project trip generation. Project trip generation has been developed using the rates for Land Use 150 – "Warehousing", and Land Use 710 – "General Office Building" from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition). Project truck trips were converted to passenger car equivalents (PCEs) using the appropriate PCE conversion factors. The concept of PCE accounts for the larger impact of trucks on traffic operations. It does so by assigning each type of truck a PCE factor that represents the number of passenger vehicles that could travel through an intersection at the same time that a particular type of truck could. The Transportation Research Board (TRB) Highway Capacity Manual (HCM) recommends applying a PCE factor of 2.0 to convert truck trips to equivalent passenger car trips. However, as a conservative approach, all truck trips were converted to PCE using a 2.0 PCE factor for 2-axle and 3-axle trucks, and 3.0 for 4- and more axle trucks. The project is estimated to generate 970 daily PCE trips, with 100 trips occurring during the AM peak hour and 105 trips occurring during the PM peak hour.

<u>LOS Analysis</u>. Intersection LOS was calculated using the Synchro 12 software, which uses the HCM 7 methodologies, and SIDRA software for roundabouts. Roadway segment LOS was calculated based on the Florida LOS tables, consistent with the TIS Guidelines.

Under the existing conditions, all study intersections and study roadway segments are currently operating at a satisfactory LOS. Similarly, under the Existing Plus Project and Near-Term Without Project scenarios, all study intersections and roadway segments are forecast to operate at a satisfactory LOS.

For the Near-Term Plus Project, Cumulative Without Project and Cumulative Plus Project scenarios, all study roadway segments are forecast to operate at a satisfactory LOS. However, an operational deficiency is forecast to exist at the intersection of Englehart Avenue/Dinuba Avenue under these three scenarios.

At locations where the project adds to or creates a forecast deficiency and there is no funding mechanism in place, the project is responsible for its fair-share payment. For the intersection at Dinuba Avenue/Englehart Avenue, converting the existing two-way stop control (TWSC) to all-way stop control (AWSC) is recommended to eliminate the forecasted operational deficiency under near-term and cumulative conditions. As there is no funding mechanism/fee program available for the recommended improvements, the proposed project will be paying its fair share for the recommended improvements at the intersection of Englehart Avenue/Dinuba Avenue. Therefore, the intersection is forecast to operate at a satisfactory LOS with the implementation of the proposed improvement and impacts to intersection LOS would be less than significant. No mitigation is required.

The proposed project would not involve the alteration of any existing roadways, transit or bicycle infrastructure in the surrounding area, and would not interfere with the operation of any transit, bicycle, and pedestrian facilities. The project would include the construction of pedestrian sidewalks along the project frontage with Huntsman Avenue, which would be constructed pursuant to City standards. The proposed project would not conflict with applicable existing transportation programs and policies. Therefore, the proposed project would result in a less than significant impact.

#### b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

**Less Than Significant Impact.** SB 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as VMT instead of LOS. VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The *State CEQA Guidelines* were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities is no longer a relevant CEQA criteria for transportation impacts.

The City of Reedley is one of the member jurisdictions of Fresno COG and follows the Fresno County SB 743 Implementation Regional Guidelines, dated January 2021 (VMT Guidelines) that includes recommended screening criteria, methodology and significant threshold criteria for projects within Fresno COG member jurisdictions, including Reedley. Therefore, the VMT evaluation in the TIS was conducted using the recommended screening criteria, methodology and significant threshold criteria included in the VMT Guidelines.

<u>Methodology and Thresholds of Significance</u>. The VMT Guidelines provide multiple screening criteria for land use projects. Each of these criteria was evaluated for the project to determine if the project can be screened out. However, as described in the TIS, the project cannot be screened out from a detailed VMT analysis. As such, pursuant to the VMT Guidelines, a detailed VMT analysis was conducted using the regional travel demand model.

The project includes non-residential land uses only; however, it is a mixed-use project with primarily industrial and office uses that would require a General Plan Amendment. Pursuant to the VMT

Guidelines, VMT per employee was used as the VMT metric to determine project impacts. Additionally, as recommended in the VMT Guidelines, the threshold for determining VMT impacts has been considered as 13 percent below the region's current baseline VMT per employee, the entire Fresno County was identified as the region for VMT analysis for non-residential projects, and the Fresno COG Activity-Based Model (ABM) was used to calculate project VMT.

As discussed in the TIS, the baseline regional average is 25.6 VMT per employee. Further, as stated above, 13 percent below the baseline regional VMT per employee, or 22.3, was considered as the VMT threshold.

Based on the Fresno COG ABM model output, the project VMT per employee for the proposed office use was calculated to be 12.4, 44.39 percent lower than the VMT threshold. Similarly, the VMT per employee for the proposed warehouse use was calculated to be 12.8, which is 42.60 percent lower than the VMT threshold. As such, both project components are estimated to have no significant VMT impact. Therefore, the proposed project would have a less than significant VMT impact.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. Vehicle access to the project site would be provided by two driveways located along Huntsman Avenue. Both project driveways would be one-way stop controlled, meaning vehicles exiting the project site from a project driveway would need to stop before merging on the neighboring circulation network. Pedestrian circulation for the proposed project would occur through proposed pedestrian sidewalks to be constructed pursuant to City requirements along the project frontage with Huntsman Avenue, and through internal pathways and walkways in the project site.

As described in the Driveway Access Analysis prepared for the project in the TIS, project traffic would not create blockages for the through traffic along Huntsman Avenue. Along the project frontage, currently there is no dedicated on-street parking provision. Additionally, there's no other large objects present or proposed as part of the project frontage improvement to obstruct the sight distance of vehicles exiting the project site. Therefore, both project driveways would have adequate sight distance for safe maneuvers of project traffic.

In addition, the proposed project would not include any sharp curves or other roadway design elements that would create dangerous conditions. In addition, the project design features would be required to comply with standards set by the City's General Plan and City Engineer. In addition, the proposed project would also be required to submit plans to the RFD for review and approval prior to the issuance of building permits to ensure there are no substantial hazards associated with the project design. Therefore, the proposed project would result in a less than significant impact related to hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and no mitigation is required.

### d. Would the project result in inadequate emergency access?

Less Than Significant Impact. Emergency vehicles would have access to the project site via two driveways located on Huntsman Avenue. Further, the proposed project's site plan would be subject to review and approval by the RFD to ensure the project includes adequate emergency access. In addition, as discussed in Section 3.9, Hazards and Hazardous Material, project implementation would not physically interfere with emergency evacuation or the RFD access to and from the project site. Therefore, the proposed project would result in less than significant impacts related to inadequate emergency access, and no mitigation is required.

#### 3.18 TRIBAL CULTURAL RESOURCES

			Less Than		
		Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
tribal cultu Section 21 landscape and scope	oject: ubstantial adverse change in the significance of a ural resource, defined in Public Resources Code .074 as either a site, feature, place, cultural that is geographically defined in terms of the size of the landscape, sacred place, or object with the size to a California Native American tribe, and that	·		·	·
Histor resou	d or eligible for listing in the California Register of rical Resources, or in a local register of historical urces as defined in Public Resources Code Section .1(k)? Or		$\boxtimes$		
discre signif (c) of the cr Resou consid	ource determined by the lead agency, in its etion and supported by substantial evidence, to be icant pursuant to criteria set forth in subdivision Public Resources Code Section 5024.1? In applying riteria set forth in subdivision (c) of Public urce Code Section 5024.1, the lead agency shall der the significance of the resource to a California e American tribe.				

#### 3.18.1 Impact Analysis

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or
  - ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant with Mitigation Incorporated. The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting traditional Tribal Cultural Resources (TCRs) through the State CEQA Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places,

and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a TCR (PRC Section 21074(a)(1-2)).

Additional information may also be available from the California NAHC's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System (CHRIS) administered by the California Office of Historic Preservation (OHP). Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

AB 52, which became law January 1, 2015, requires that, as part of the CEQA review process, public agencies provide early notice of a project to California Native American Tribes to allow for consultation between the tribe and the public agency. The purpose of AB 52 is to provide the opportunity for public agencies and tribes to consult and consider potential impacts to TCRs, as defined by the PRC Section 2107(a). Under AB 52, public agencies shall reach out to California Native American Tribes who have requested to be notified of projects in areas within or which may have been affiliated with their tribal geographic range. Pursuant to AB 52, Santa Rosa Indian Community of the Santa Rosa Rancheria was invited to consult on March 24, 2023. The contracted Tribe responded to the consultation notice on May 10, 2023, requesting a copy of the cultural resource assessment prepared for the project, and for an archeological monitor to be present onsite during all ground disturbing activities related to project development. The Tribe's request has been implemented through the provision of the project's cultural resource assessment and through Mitigation Measure CUL-1, which requires an archeological monitor to be present during project ground disturbing activities. As such, AB 52 consultation requirements have been fulfilled.

Furthermore, Mitigation Measures CUL-1 and CUL-2 included in Section 3.5, Cultural Resources, would apply to the project and would reduce potential impacts to unknown TCRs to less than significant.

#### **3.19 UTILITIES AND SERVICE SYSTEMS**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			$\boxtimes$	
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			$\boxtimes$	
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			$\boxtimes$	
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

#### 3.19.1 Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

#### Less Than Significant Impact.

<u>Water</u>. Water supply for the proposed project would be provided by the City of Reedley. The proposed project would connect to a proposed water main along East Huntsman Avenue.

Short-term demand for water may occur during excavation, grading, and construction activities on site. Construction activities would require water primarily for dust mitigation purposes. Water from existing potable water lines in the vicinity of the project site would be used. Overall, short-term construction activities would require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies. The proposed project would not require the construction of new or expanded water conveyance, treatment, or collection facilities with respect to construction activities. According to the City's 2020 UWMP, <sup>48</sup> the City obtains its entire water supply from the Kings Subbasin. Water is extracted through seven active domestic water supply wells and distributed through the City's water system, which consists of 82 miles of

<sup>&</sup>lt;sup>48</sup> City of Reedley. 2021. 2020 Urban Water Management Plan. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2021/12/City\_of\_Reedley\_UWMP\_-\_Public\_Draft-1639427519.pdf (accessed June 2023).

pipeline and three elevated storage tanks. The City's UWMP identified that the City's 2020 daily per capita water use target was 215 gallons per capita per day (GPCD). Although the project would not include residential uses that would permanently increase the population of the project site, the project site would be occupied by approximately 555 employees once operational. Using the City's per capita water use target to estimate project water use, the project would require 119,325 gallons of water per day. As described in the discussion for b) below, Reedley would have sufficient water supplies during normal, single-year dry and multiple-year dry scenarios through 2045, and given that the project would introduce light industrial development on the project site consistent with planned growth in Reedley per the General Plan, the proposed project would be consistent with growth under the General Plan, and would be accounted for in the City's UWMP projections. As such, the proposed project would not necessitate new or expanded water entitlements, and the city would be able to accommodate the increased demand for potable water.

<u>Wastewater</u>. Wastewater sewage services for the proposed project would be provided by the City of Reedley. The proposed project would connect to a proposed wastewater main along East Huntsman Avenue. Wastewater from the project site would be collected and transported to the City of Reedley WWTP. The WWTP has a treatment capacity of to 7.0 million gallons per day (mgd).

No significant increase in wastewater flows is anticipated as a result of construction activities on the project site. Sanitary services during construction would be provided by portable toilet facilities, which transport waste off site for treatment and disposal. Based on estimated water consumption for the project, wastewater generation is estimated to be 119,325 gallons per day. Based on the capacity of existing infrastructure, wastewater generation associated with the proposed project is not anticipated to exceed wastewater treatment requirements or exceed the available capacity to accommodate the increased wastewater flows from the proposed project. The project would be adequately served by the capacity and the existing wastewater conveyance system. The Project Applicant would be required to cover payment of any applicable connection charges and/or fees and extension of services in a manner which is compliant with the City's standards, specifications, and policies. As such, the proposed project would not necessitate new or expanded wastewater facilities, and the City would be able to accommodate the increased demand for wastewater services.

**Stormwater.** The City of Reedley would provide stormwater management services to the projects site. Stormwater from the project site would be collected through surface and subsurface drainage infrastructure onsite towards proposed stormwater collection and drainage infrastructure along East Huntsman Avenue.

Impacts to storm drainage facilities have been previously discussed in Section 3.10, Hydrology and Water Quality. The proposed project would result in the construction of new surface and subsurface drainage infrastructure to direct stormwater towards the City's proposed stormwater collection and drainage system along East Huntsman Avenue and towards the City's infiltration infrastructure. However, the construction of such minor facilities would be constructed in conformance with City standards; therefore, its construction would not cause significant environmental effects.

<u>Natural Gas and Electricity Facilities</u>. Natural gas and electricity services would be provided by PG&E and would be supplied through connections to existing service infrastructure. Natural gas and

electricity facilities would require connections to the project site. However, because the project site is located within an area with existing facilities in close proximity, connection to these facilities would not cause significant environmental effects. As a result, the project would result in a less-than-significant impact related to the relocation or construction or new or expanded utilities.

<u>Summary</u>. The proposed project would not require or result in the relocation or construction of new or expanded facilities for water, wastewater treatment, storm drainage, electric power or telecommunications which could cause significant environmental effects. Impacts would be less than significant, and no mitigation is required.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

**Less Than Significant Impact.** Refer to discussion b) of Section 3.10, Hydrology and Water Quality. Based on the City's 2020 UWMP, the water supplies under normal conditions for the City from 2025 (1,795 AFY) to 2045 (2,818 AFY) would be sufficient to cover the potable water demand (i.e., 1,795 acre-feet by 2025 and 2,818 acre-feet by 2045) for each normal year respectively.<sup>49</sup>

During a single dry year, water supplies for the city from 2025 (1,795 AFY) to 2045 (2,818 AFY) would be sufficient to cover the potable water demand for each year (i.e., 1,795 acre-feet by 2025 and 2,818 acre-feet by 2045) respectively.

After a 5-year dry period, water supplies for the city from 2025 (1,795 AFY) to 2045 (2,818 AFY) would be sufficient to cover the potable water demand for each year (i.e., 1,795 acre-feet by 2025 and 2,818 acre-feet by 2045), respectively.

The project site is planned for light industrial development according to the City's General Plan. As the project proposes the development of a light industrial park, the proposed project would introduce uses compatible with the project site's General Plan land use designation. Therefore, the project would be consistent with growth under the City's General Plan and would be accounted for in the City's UWMP projections. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years, and the impact would be less than significant.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

**Less Than Significant Impact.** Refer to discussion a) above. Wastewater generation associated with the proposed project is not anticipated to exceed wastewater treatment requirements or exceed the available capacity to accommodate the increased wastewater flows from the proposed project. The project would be adequately served by the capacity of the existing wastewater conveyance

<sup>&</sup>lt;sup>49</sup> City of Reedley. 2021. 2020 Urban Water Management Plan. Website: https://reedley.ca.gov/wp-content/uploads/reedleyweb/2021/12/City\_of\_Reedley\_UWMP\_-\_Public\_Draft-1639427519.pdf (accessed June 2023).

system. In addition, the proposed project is not expected to exceed wastewater treatment requirements of the applicable RWQCB. As such, the proposed project would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. In addition, the proposed project would be subject to the payment of any applicable connection charges and/or fees and extension of services in a manner that is compliant with the City's standards, specifications, and policies. As such, impacts would be less than significant. No mitigation is required.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

**Less Than Significant Impact.** The City of Reedley has an exclusive franchise agreement with Mid Valley Disposal, which includes curb-side garbage and recycling pick up and hauling within the City. The solid waste is then disposed at the American Avenue Disposal Site.

The American Avenue Landfill (i.e., American Avenue Disposal Site 10-AA-0009) has a maximum permitted capacity of 32,700,000 cubic yards and a remaining capacity of 29,358,535 cubic yards, with an estimated closure date of August 31, 2031. The maximum permitted throughput is 2,200 tons per day (tpd).<sup>50</sup>

According to the CalEEMod analysis prepared for the project, operation of the proposed project would generate approximately 436 tons of solid waste per year, or approximately 1.2 tpd. Given the available capacity at the landfills, the additional solid waste generated by the proposed project is not anticipated to cause the facility to exceed its daily permitted capacity. As such, the project would be served by a landfill with sufficient capacity to accommodate the project's waste disposal needs, and impacts associated with the disposition of solid waste would be less than significant.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. To comply with the California Integrated Waste Management Act of 1989 (AB 939), the County must divert at least 50 percent of its solid waste from landfills. In addition, AB 341 sets a statewide 75 percent recycling goal by 2020. AB 341 also requires businesses generating more than four cubic yards of solid waste to recycle. The project is required to comply with federal, State, and local management and reduction statues and regulations, including Title 14 and Title 27 of the CCR and General Plan goals and policies. Therefore, the proposed project would not conflict with federal, state, and local management and reduction statutes and regulations related to solid waste, and impacts would be less than significant. No mitigation is required.

California Department of Resources Recycling and Recovery (CalRecycle). SWIS Facility/Site Summary. American Avenue Disposal Site (10-AA-0009). Website: https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/352 (accessed June 2023).

#### 3.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified				
<ul><li>as very high fire hazard severity zones, would the project:</li><li>a. Substantially impair an adopted emergency response plan or emergency evacuation plan?</li></ul>				
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			$\boxtimes$	
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			$\boxtimes$	
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

#### 3.20.1 Impact Analysis

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

**Less Than Significant Impact.** The proposed project would not interfere with any emergency evacuation routes within Reedley or an adopted emergency response plan. The project would not impede access to any nearby roadways that may serve as emergency access routes in the project vicinity. Therefore, the impact would be less than significant.

b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

**Less Than Significant Impact.** The project site is in an area mapped by CAL FIRE as LRA Unzoned, indicating that the area is urbanized and not susceptible to wildland conflagrations, and is not located within a VHFHSZ. The project site would comply with City and County fire safety regulations for project construction and operation. Therefore, the proposed project would not exacerbate wildfire risks and potentially expose project occupants to wildfires. The impact would be less than significant.

California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fresno County State Responsibility Area Fire Hazard Severity Zones. Website: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/(accessed August 2023).



c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less Than Significant Impact. The project site is located in an LRA Unzoned area and is not located within a VHFHSZ. Although the proposed project may require the installation of infrastructure to serve the site, the installation of this infrastructure would not exacerbate fire risk in the project vicinity. The installation of water, wastewater and stormwater infrastructure to serve the project site would comply with design and construction requirements of the City. The Project Applicant would also pay for applicable impact fees and connection fees for utilities that would serve the project site. Compliance with utility installation requirements of the City and utility providers would reduce potential impacts to less than significant.

d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. As discussed above, the project is not located within a VHFHSZ. The project site is also located on a relatively flat area and is not adjacent to any hills. In general, the potential for land sliding or slope failure in Reedley is very low, and the project site would not be susceptible to landslides. Although portions of the project site within the Travers Creek frontage are within a flood hazard zone, the project would comply with the City of Reedley's flood ordinance (Title 12 of the Reedley Municipal Code). Implementation of design requirements outlined in the City's flood ordinance would reduce potential impacts associated with flooding due to post-fire drainage changes. Therefore, the proposed project would not expose people or structures to significant post-fire risks, and the impact would be less than significant.

#### 3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		$\boxtimes$		
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		$\boxtimes$		
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

#### 3.21.1 Impact Analysis

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation Incorporated. As discussed in Section 3.4, Biological Resources and Section 3.5, Cultural Resources, with the incorporation of Mitigation Measures BIO-1 through BIO-9 and CUL-1 and CUL-2, development of the proposed project would not: (1) degrade the quality of the environment; (2) substantially reduce the habitat of a fish or wildlife species; (3) cause a fish or wildlife species population to drop below self-sustaining levels; (4) threaten to eliminate a plant or animal community; (5) reduce the number or restrict the range of a rare or endangered plant or animal; or (6) eliminate important examples of the major periods of California history. Therefore, this impact would be less than significant with mitigation incorporated.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

**Less Than Significant with Mitigation Incorporated.** The proposed project's impacts would be individually limited and not cumulatively considerable due to the site-specific nature of the potential impacts. The potentially significant impacts that can be reduced to less-than-significant levels with

implementation of recommended mitigation measures include the topics of Aesthetics, Air Quality, Biological Resources, Cultural Resources, and Noise. These impacts would primarily be related to construction-period activities, would be temporary in nature, and would not substantially contribute to any potential cumulative impacts associated with these topics.

Implementation of mitigation measures AIR-1, BIO-1 through BIO-9, CUL-1 and CUL-2, GEO-1, GHG-1 NOI-1 and NOI-2 would ensure that the impacts of the project would be below established thresholds of significance. Since the proposed project would not result in any significant project-level impacts, the proposed project would not result in any significant impacts that would combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development. As such, this impact would be less than significant with mitigation incorporated.

For the topics of Aesthetics, Agriculture and Forestry Resources, Energy, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildlife, the project would have no impacts or less than significant impacts; therefore, the project would not substantially contribute to any potential cumulative impacts for these topics. As such, impacts would be less than significant with mitigation incorporated.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant with Mitigation Incorporated. The proposed project's potential to result in environmental effects that could directly or indirectly impact human beings has been evaluated in this Initial Study. With implementation of the recommended mitigation measures, all environmental effects that could adversely affect human beings, either directly or indirectly, would be less than significant with mitigation incorporated.

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## **APPENDIX A**

# **CALLEEMOD OUTPUT SHEETS**

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# East Huntsman Avenue Industrial Park Project Custom 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	East Huntsman Avenue Industrial Park Project
Construction Start Date	1/6/2025
Operational Year	2026
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	31.4
Location	20349 E Huntsman Ave, Reedley, CA 93654, USA
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2511
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.20

# 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq	Special Landscape	Population	Description
						Area (sq ft)		

Industrial Park	352	1000sqft	39.8	351,560	32,670	_	_	_
Parking Lot	705	Space	2.23	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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1.11	13.4	20.3	0.03	0.51	1.00	1.51	0.47	0.24	0.71	_	4,051	4,051	0.14	0.17	4,110
Mit.	0.90	3.59	20.3	0.03	0.05	1.00	1.05	0.05	0.24	0.30	_	4,051	4,051	0.14	0.17	4,110
% Reduced	19%	73%	_	_	90%	_	30%	89%	_	58%	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	111	30.4	36.0	0.06	1.25	7.76	8.70	1.12	3.96	4.80	_	6,706	6,706	0.27	0.17	6,731
Mit.	111	4.48	36.0	0.06	0.12	7.76	7.86	0.12	3.96	4.06	_	6,706	6,706	0.27	0.17	6,731
% Reduced	< 0.5%	85%	_	_	90%	_	10%	89%	_	15%	_	_	_	_	_	_
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Unmit.	4.38	10.1	13.9	0.02	0.39	0.96	1.35	0.36	0.32	0.68	_	2,771	2,771	0.10	0.10	2,804
Mit.	4.22	2.43	13.9	0.02	0.04	0.96	1.00	0.04	0.32	0.36	_	2,771	2,771	0.10	0.10	2,804
% Reduced	4%	76%	_	_	90%	_	26%	89%	_	47%	_	_	_	_	_	_
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.80	1.84	2.54	< 0.005	0.07	0.18	0.25	0.07	0.06	0.12	_	459	459	0.02	0.02	464
Mit.	0.77	0.44	2.54	< 0.005	0.01	0.18	0.18	0.01	0.06	0.07	_	459	459	0.02	0.02	464
% Reduced	4%	76%	_	_	90%	_	26%	89%	_	47%	_	_	_	_	_	_

# 2.2. Construction Emissions by Year, Unmitigated

Year	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	1.11	13.4	20.3	0.03	0.51	1.00	1.51	0.47	0.24	0.71	_	4,051	4,051	0.14	0.17	4,110
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	111	30.4	36.0	0.06	1.25	7.76	8.70	1.12	3.96	4.80	_	6,706	6,706	0.27	0.17	6,731
2026	111	1.16	1.78	< 0.005	0.07	0.16	0.23	0.06	0.04	0.10	_	289	289	0.01	0.01	292
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	4.38	10.1	13.9	0.02	0.39	0.96	1.35	0.36	0.32	0.68	_	2,771	2,771	0.10	0.10	2,804
2026	0.43	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.15	1.15	< 0.005	< 0.005	1.17
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.80	1.84	2.54	< 0.005	0.07	0.18	0.25	0.07	0.06	0.12	_	459	459	0.02	0.02	464
2026	0.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.19	0.19	< 0.005	< 0.005	0.19

# 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	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.90	3.59	20.3	0.03	0.05	1.00	1.05	0.05	0.24	0.30	_	4,051	4,051	0.14	0.17	4,110
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	111	4.48	36.0	0.06	0.12	7.76	7.86	0.12	3.96	4.06	_	6,706	6,706	0.27	0.17	6,731
2026	111	0.72	1.78	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	_	289	289	0.01	0.01	292
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	4.22	2.43	13.9	0.02	0.04	0.96	1.00	0.04	0.32	0.36	_	2,771	2,771	0.10	0.10	2,804
2026	0.43	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.15	1.15	< 0.005	< 0.005	1.17
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
2025	0.77	0.44	2.54	< 0.005	0.01	0.18	0.18	0.01	0.06	0.07	_	459	459	0.02	0.02	464
2026	0.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.19	0.19	< 0.005	< 0.005	0.19

## 2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	12.4	5.06	30.3	0.05	0.33	2.14	2.47	0.32	0.54	0.86	391	12,013	12,403	40.7	0.61	13,706
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Unmit.	9.68	5.12	13.6	0.05	0.30	2.14	2.44	0.30	0.54	0.84	391	11,709	12,100	40.8	0.63	13,397
Average Daily (Max)	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	10.9	5.09	20.9	0.05	0.31	2.10	2.41	0.31	0.53	0.84	391	11,808	12,199	40.8	0.62	13,498
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	2.00	0.93	3.81	0.01	0.06	0.38	0.44	0.06	0.10	0.15	64.7	1,955	2,020	6.75	0.10	2,235

## 2.5. Operations Emissions by Sector, Unmitigated

Sector	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.68	1.16	11.8	0.03	0.01	2.14	2.16	0.01	0.54	0.55	_	2,616	2,616	0.11	0.13	2,667
Area	10.5	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	12.4	5.06	30.3	0.05	0.33	2.14	2.47	0.32	0.54	0.86	391	12,013	12,403	40.7	0.61	13,706
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.49	1.35	10.4	0.02	0.01	2.14	2.16	0.01	0.54	0.55	_	2,376	2,376	0.13	0.14	2,422
Area	7.98	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Nater	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822

Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	9.68	5.12	13.6	0.05	0.30	2.14	2.44	0.30	0.54	0.84	391	11,709	12,100	40.8	0.63	13,397
Average Daily	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_
Mobile	1.51	1.25	10.2	0.02	0.01	2.10	2.11	0.01	0.53	0.54	_	2,443	2,443	0.12	0.14	2,491
Area	9.22	0.06	7.54	< 0.005	0.01	_	0.01	0.01	_	0.01	_	31.0	31.0	< 0.005	< 0.005	31.1
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	10.9	5.09	20.9	0.05	0.31	2.10	2.41	0.31	0.53	0.84	391	11,808	12,199	40.8	0.62	13,498
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.28	0.23	1.86	< 0.005	< 0.005	0.38	0.39	< 0.005	0.10	0.10	_	405	405	0.02	0.02	412
Area	1.68	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15
Energy	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	1,516	1,516	0.19	0.02	1,525
Water	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141
Waste	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136
Refrig.	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	15.2
Total	2.00	0.93	3.81	0.01	0.06	0.38	0.44	0.06	0.10	0.15	64.7	1,955	2,020	6.75	0.10	2,235

## 2.6. Operations Emissions by Sector, Mitigated

Sector	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.68	1.16	11.8	0.03	0.01	2.14	2.16	0.01	0.54	0.55	_	2,616	2,616	0.11	0.13	2,667
Area	10.5	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1

Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29		9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	-	_	_	_	_	_	-	_	_	_	_	91.5
Total	12.4	5.06	30.3	0.05	0.33	2.14	2.47	0.32	0.54	0.86	391	12,013	12,403	40.7	0.61	13,706
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.49	1.35	10.4	0.02	0.01	2.14	2.16	0.01	0.54	0.55	_	2,376	2,376	0.13	0.14	2,422
Area	7.98	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	9.68	5.12	13.6	0.05	0.30	2.14	2.44	0.30	0.54	0.84	391	11,709	12,100	40.8	0.63	13,397
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.51	1.25	10.2	0.02	0.01	2.10	2.11	0.01	0.53	0.54	_	2,443	2,443	0.12	0.14	2,491
Area	9.22	0.06	7.54	< 0.005	0.01	_	0.01	0.01	_	0.01	_	31.0	31.0	< 0.005	< 0.005	31.1
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	10.9	5.09	20.9	0.05	0.31	2.10	2.41	0.31	0.53	0.84	391	11,808	12,199	40.8	0.62	13,498
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.28	0.23	1.86	< 0.005	< 0.005	0.38	0.39	< 0.005	0.10	0.10	_	405	405	0.02	0.02	412
Area	1.68	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15
Energy	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	1,516	1,516	0.19	0.02	1,525
Water	<u> </u>	_	_		_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141

Waste	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	15.2
Total	2.00	0.93	3.81	0.01	0.06	0.38	0.44	0.06	0.10	0.15	64.7	1,955	2,020	6.75	0.10	2,235

# 3. Construction Emissions Details

# 3.1. Site Preparation (2025) - Unmitigated

		,	J,				` ,	<b>J</b> ,	,							_
Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_		_	_	_	_	_		_
Off-Road Equipment	0.90	24.0	28.3	0.05	0.94	_	0.94	0.84	_	0.84	_	5,295	5,295	0.21	0.04	5,314
Dust From Material Movement	_	_	_	_	_	7.67	7.67	_	3.94	3.94	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.66	0.78	< 0.005	0.03	_	0.03	0.02	_	0.02	_	145	145	0.01	< 0.005	146
Dust From Material Movement		_	_	_	_	0.21	0.21	_	0.11	0.11	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.12	0.14	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	24.0	24.0	< 0.005	< 0.005	24.1
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	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.05	0.53	0.00	0.00	0.10	0.10	0.00	0.02	0.02	_	94.2	94.2	< 0.005	< 0.005	95.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_		_	_	_	_	_	_	_	_		_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.67	2.67	< 0.005	< 0.005	2.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.44	0.44	< 0.005	< 0.005	0.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00

## 3.2. Site Preparation (2025) - Mitigated

Location	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	-
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Off-Road Equipment	0.50	2.59	28.3	0.05	0.10	_	0.10	0.10	_	0.10	_	5,295	5,295	0.21	0.04	5,314
Dust From Material Movement	_	_	_	_	_	7.67	7.67	_	3.94	3.94	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.07	0.78	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	145	145	0.01	< 0.005	146
Dust From Material Movement	_	_	_	_	_	0.21	0.21	_	0.11	0.11	_	_	_	_	_	-
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.14	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	24.0	24.0	< 0.005	< 0.005	24.1
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	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.05	0.53	0.00	0.00	0.10	0.10	0.00	0.02	0.02	_	94.2	94.2	< 0.005	< 0.005	95.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.67	2.67	< 0.005	< 0.005	2.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.44	0.44	< 0.005	< 0.005	0.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00

# 3.3. Grading (2025) - Unmitigated

Location	ROG		со					PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	<del>_</del>	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	1.18	30.3	35.3	0.06	1.25	_	1.25	1.12	_	1.12	_	6,599	6,599	0.27	0.05	6,622

Dust From	_	_		_	_	3.59	3.59	_	1.42	1.42	_	_	_	_	_	_
Material Movement																
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Off-Road Equipment	0.06	1.66	1.94	< 0.005	0.07	_	0.07	0.06	_	0.06	_	362	362	0.01	< 0.005	363
Dust From Material Movement	_	_	_	_	_	0.20	0.20	_	0.08	0.08	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.01	0.30	0.35	< 0.005	0.01	_	0.01	0.01	_	0.01	_	59.9	59.9	< 0.005	< 0.005	60.1
Dust From Material Movement	_	_	-	_	_	0.04	0.04	_	0.01	0.01	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.08	0.05	0.60	0.00	0.00	0.11	0.11	0.00	0.03	0.03	_	108	108	< 0.005	0.01	109
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-

Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	6.11	6.11	< 0.005	< 0.005	6.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	1.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00

# 3.4. Grading (2025) - Mitigated

Location	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.64	4.43	35.3	0.06	0.12	_	0.12	0.12	_	0.12	_	6,599	6,599	0.27	0.05	6,622
Dust From Material Movement		_	_	_	_	3.59	3.59	_	1.42	1.42	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Off-Road Equipment	0.04	0.24	1.94	< 0.005	0.01	_	0.01	0.01	-	0.01	-	362	362	0.01	< 0.005	363
Dust From Material Movement	_	_	_	_	_	0.20	0.20	21 / 66	0.08	0.08	_	_	_	_	_	_

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.01	0.04	0.35	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	59.9	59.9	< 0.005	< 0.005	60.1
Dust From Material Movement	_	_	_	_	_	0.04	0.04	_	0.01	0.01	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.08	0.05	0.60	0.00	0.00	0.11	0.11	0.00	0.03	0.03	_	108	108	< 0.005	0.01	109
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	6.11	6.11	< 0.005	< 0.005	6.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	1.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00

# 3.5. Building Construction (2025) - Unmitigated

Location	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.44	11.8	14.3	0.02	0.50	_	0.50	0.46	_	0.46	_	2,398	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.44	11.8	14.3	0.02	0.50	_	0.50	0.46	_	0.46	_	2,398	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	6.48	7.84	0.01	0.28	_	0.28	0.25	_	0.25	_	1,314	1,314	0.05	0.01	1,318
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.04	1.18	1.43	< 0.005	0.05	_	0.05	0.05	_	0.05	_	218	218	0.01	< 0.005	218
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	-	_	_	_	_	_	_	_	-	_	_	-	_	_
Vorker	0.63	0.34	5.50	0.00	0.00	0.80	0.80	0.00	0.19	0.19	_	895	895	0.03	0.04	911

Vendor	0.04	1.22	0.54	0.01	0.01	0.19	0.20	0.01	0.05	0.06	<u> </u>	758	758	0.02	0.11	794
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.55	0.41	4.45	0.00	0.00	0.80	0.80	0.00	0.19	0.19	_	794	794	0.04	0.04	807
Vendor	0.04	1.30	0.57	0.01	0.01	0.19	0.20	0.01	0.05	0.06	_	759	759	0.02	0.11	793
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.31	0.20	2.48	0.00	0.00	0.43	0.43	0.00	0.10	0.10	_	451	451	0.02	0.02	458
Vendor	0.02	0.69	0.30	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	_	416	416	0.01	0.06	435
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.04	0.45	0.00	0.00	0.08	0.08	0.00	0.02	0.02	_	74.7	74.7	< 0.005	< 0.005	75.9
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	_	68.8	68.8	< 0.005	0.01	72.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

# 3.6. Building Construction (2025) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.23	2.03	14.3	0.02	0.04	_	0.04	0.04	_	0.04	_	2,398	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.23	2.03	14.3	0.02	0.04	_	0.04	0.04	_	0.04	_	2,398	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	-
Off-Road Equipment	0.13	1.11	7.84	0.01	0.02	_	0.02	0.02	_	0.02	_	1,314	1,314	0.05	0.01	1,318
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.02	0.20	1.43	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	218	218	0.01	< 0.005	218
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	-	_	_	_	_	_	_	_	_	-	_	_	_	_
Worker	0.63	0.34	5.50	0.00	0.00	0.80	0.80	0.00	0.19	0.19	_	895	895	0.03	0.04	911
Vendor	0.04	1.22	0.54	0.01	0.01	0.19	0.20	0.01	0.05	0.06	_	758	758	0.02	0.11	794
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	-	_	_	_	_	_	_	_	-	-	_	_	_	_
Worker	0.55	0.41	4.45	0.00	0.00	0.80	0.80	0.00	0.19	0.19	_	794	794	0.04	0.04	807
Vendor	0.04	1.30	0.57	0.01	0.01	0.19	0.20	0.01	0.05	0.06	_	759	759	0.02	0.11	793
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	-	_	_	_	-	-	_

Worker	0.31	0.20	2.48	0.00	0.00	0.43	0.43	0.00	0.10	0.10	_	451	451	0.02	0.02	458
Vendor	0.02	0.69	0.30	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	_	416	416	0.01	0.06	435
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.04	0.45	0.00	0.00	0.08	0.08	0.00	0.02	0.02	_	74.7	74.7	< 0.005	< 0.005	75.9
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	_	68.8	68.8	< 0.005	0.01	72.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

# 3.7. Paving (2025) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.32	8.62	10.6	0.01	0.39	_	0.39	0.36	_	0.36	_	1,511	1,511	0.06	0.01	1,517
Paving	0.39	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.35	0.44	< 0.005	0.02	_	0.02	0.01	_	0.01	_	62.1	62.1	< 0.005	< 0.005	62.3
Paving	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.06	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.3	10.3	< 0.005	< 0.005	10.3
Paving	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.06	0.04	0.45	0.00	0.00	0.08	0.08	0.00	0.02	0.02	_	80.7	80.7	< 0.005	< 0.005	82.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	3.44	3.44	< 0.005	< 0.005	3.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.57	0.57	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00

## 3.8. Paving (2025) - Mitigated

Ontona i	Ollatarito	(ID/Gay IC	n duny, to	ninyi ioi a	illiadij di	u 01103	(ID/Gay IO	i dully, ivi	17 yr 101 ai	illiaaij						
Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.16	1.93	10.6	0.01	0.03	_	0.03	0.03	_	0.03	_	1,511	1,511	0.06	0.01	1,517
Paving	0.39	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.08	0.44	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	62.1	62.1	< 0.005	< 0.005	62.3
Paving	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	10.3	10.3	< 0.005	< 0.005	10.3
Paving	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.06	0.04	0.45	0.00	0.00	0.08	0.08	0.00	0.02	0.02	_	80.7	80.7	< 0.005	< 0.005	82.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	3.44	3.44	< 0.005	< 0.005	3.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.57	0.57	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00

## 3.9. Architectural Coating (2025) - Unmitigated

			or daily, to		<u> </u>											
Location	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	_	0.07	0.06	_	0.06	_	134	134	0.01	< 0.005	134
Architectu ral Coatings	110		_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	4.44	4.44	< 0.005	< 0.005	4.46
Architectu ral Coatings	3.67	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	0.74	0.74	< 0.005	< 0.005	0.74
Architectu ral Coatings	0.67	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.11	0.08	0.89	0.00	0.00	0.16	0.16	0.00	0.04	0.04	_	159	159	0.01	0.01	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	-	_	_	_	_	_	_	_	_	-	_	_	-	_
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	5.48	5.48	< 0.005	< 0.005	5.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.91	0.91	< 0.005	< 0.005	0.92

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00

## 3.10. Architectural Coating (2025) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	134
Architectu ral Coatings	110	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	4.44	4.44	< 0.005	< 0.005	4.46
Architectu ral Coatings	3.67	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	-	< 0.005	_	0.74	0.74	< 0.005	< 0.005	0.74

Architectu Coatings	0.67	_	_	_	_	_	_		_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.11	80.0	0.89	0.00	0.00	0.16	0.16	0.00	0.04	0.04	_	159	159	0.01	0.01	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	5.48	5.48	< 0.005	< 0.005	5.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	-	0.91	0.91	< 0.005	< 0.005	0.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00

# 3.11. Architectural Coating (2026) - Unmitigated

 oritoria i	on ataine	(1.57 G.G.)	,	,	inidal, al	u 000	(1.07 0.07 1.0		., j c. a							
Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_		_		_		_	_		_
Daily, Winter (Max)	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	_	0.07	0.06	_	0.06	_	134	134	0.01	< 0.005	134
Architectu ral Coatings	110	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.52	0.52	< 0.005	< 0.005	0.52
Architectu ral Coatings	0.43	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	< 0.005	_	< 0.005	_	0.09	0.09	< 0.005	< 0.005	0.09
Architectu ral Coatings	0.08	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.10	0.07	0.82	0.00	0.00	0.16	0.16	0.00	0.04	0.04	-	156	156	0.01	0.01	158
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	-	0.63	0.63	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	-	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.10	0.10	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00

## 3.12. Architectural Coating (2026) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	134
Architectu ral Coatings	110	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.52	0.52	< 0.005	< 0.005	0.52
Architectu ral Coatings	0.43	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	< 0.005	_	< 0.005	_	0.09	0.09	< 0.005	< 0.005	0.09
Architectu ral Coatings	0.08	_	_	_	_	_	_	_	_	_	-	_	_	_	-	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.10	0.07	0.82	0.00	0.00	0.16	0.16	0.00	0.04	0.04	_	156	156	0.01	0.01	158
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	-	_	_	-	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.63	0.63	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.10	0.10	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	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	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

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	1.68	1.16	11.8	0.03	0.01	2.14	2.16	0.01	0.54	0.55	_	2,616	2,616	0.11	0.13	2,667
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	1.68	1.16	11.8	0.03	0.01	2.14	2.16	0.01	0.54	0.55	_	2,616	2,616	0.11	0.13	2,667
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	1.49	1.35	10.4	0.02	0.01	2.14	2.16	0.01	0.54	0.55	_	2,376	2,376	0.13	0.14	2,422
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	1.49	1.35	10.4	0.02	0.01	2.14	2.16	0.01	0.54	0.55	-	2,376	2,376	0.13	0.14	2,422
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Industrial Park	0.28	0.23	1.86	< 0.005	< 0.005	0.38	0.39	< 0.005	0.10	0.10	_	405	405	0.02	0.02	412
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.28	0.23	1.86	< 0.005	< 0.005	0.38	0.39	< 0.005	0.10	0.10	_	405	405	0.02	0.02	412

#### 4.1.2. Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	1.68	1.16	11.8	0.03	0.01	2.14	2.16	0.01	0.54	0.55	_	2,616	2,616	0.11	0.13	2,667
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	1.68	1.16	11.8	0.03	0.01	2.14	2.16	0.01	0.54	0.55	_	2,616	2,616	0.11	0.13	2,667
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	1.49	1.35	10.4	0.02	0.01	2.14	2.16	0.01	0.54	0.55	_	2,376	2,376	0.13	0.14	2,422
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Total	1.49	1.35	10.4	0.02	0.01	2.14	2.16	0.01	0.54	0.55	_	2,376	2,376	0.13	0.14	2,422
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.28	0.23	1.86	< 0.005	< 0.005	0.38	0.39	< 0.005	0.10	0.10	-	405	405	0.02	0.02	412
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Total	0.28	0.23	1.86	< 0.005	< 0.005	0.38	0.39	< 0.005	0.10	0.10	_	405	405	0.02	0.02	412

#### 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		NOx	co	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	4,607	4,607	0.75	0.09	4,652
Parking Lot	-	_	_	_	_	_	_	_	-	_	_	47.6	47.6	0.01	< 0.005	48.0
Total	_	_	_	_	_	_	_	_	_	_	_	4,654	4,654	0.75	0.09	4,700
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	-	-	_	_	_	_	_	_	_	_	_	4,607	4,607	0.75	0.09	4,652
Parking Lot	-	-	_	_	-	_	_	_	-	_	_	47.6	47.6	0.01	< 0.005	48.0
Total	_	_	_	_	_	_	_	_	_	_	_	4,654	4,654	0.75	0.09	4,700
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	-	_	_	_	_	_	_	_	_	-	_	763	763	0.12	0.01	770
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	7.87	7.87	< 0.005	< 0.005	7.95
Total	_	_	_	_	_	_	_	_	_	_	_	771	771	0.12	0.02	778

#### 4.2.2. Electricity Emissions By Land Use - Mitigated

Lan	nd Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	4,607	4,607	0.75	0.09	4,652
Parking Lot	_	_	_	_	-	_	_	_	_	_	_	47.6	47.6	0.01	< 0.005	48.0
Total	_	_	_	_	_	_	_	_	_	_	_	4,654	4,654	0.75	0.09	4,700
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	4,607	4,607	0.75	0.09	4,652
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	47.6	47.6	0.01	< 0.005	48.0
Total	_	_	_	_	_	_	_	_	_	_	_	4,654	4,654	0.75	0.09	4,700
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	763	763	0.12	0.01	770
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	7.87	7.87	< 0.005	< 0.005	7.95
Total	_	_	_	_	_	_	_	_	_	_	_	771	771	0.12	0.02	778

## 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512

Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	-	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	745	745	0.07	< 0.005	747
Parking Lot	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	-	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	<u> </u>	745	745	0.07	< 0.005	747

## 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Industrial Park	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	745	745	0.07	< 0.005	747
Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	745	745	0.07	< 0.005	747

## 4.3. Area Emissions by Source

#### 4.3.1. Unmitigated

Source	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	7.53	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landscap e Equipmen t	2.51	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1
Total	10.5	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Consumer Products	7.53	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	7.98	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	1.37	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.08	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landscap e Equipmen t	0.23	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15
Total	1.68	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15

#### 4.3.2. Mitigated

Source	ROG	NOx	CO		PM10E	PM10D			PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	7.53	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landscap e Equipmen t	2.51	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1
Total	10.5	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	7.53	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	7.98	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	1.37	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.08	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landscap e Equipmen t	0.23	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15
Total	1.68	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15

# 4.4. Water Emissions by Land Use

#### 4.4.1. Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00

Total	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	-	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141
Parking Lot	-	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141

## 4.4.2. Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850

Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141

## 4.5. Waste Emissions by Land Use

#### 4.5.1. Unmitigated

		NOx			PM10E			<u> </u>			DCO2	NDCO2	COST	CH4	NaO	CO2e
Land Use	RUG	NOX	CO	502	PINTUE	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	COZe
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Industrial Park	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136

#### 4.5.2. Mitigated

Land Use	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Parking Lot	_	_	_	-	-	-	_	_	_	-	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136

# 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)

				200							2000	N.D.O.O.O.	000=	0.11	Noo	000
Land Use	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	15.2
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	15.2

#### 4.6.2. Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	15.2
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	15.2

# 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)

Equipmen t Type	ROG		со		PM10E	PM10D		PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.7.2. Mitigated

Equipmen Type	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 4.8. Stationary Emissions By Equipment Type

# 4.8.1. Unmitigated

Equipmen t Type	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	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)

		(1.07 0.0.)	, <b>,</b> ,				(,)			,						
Equipmen t	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	CO2e
Туре																
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 4.9. User Defined Emissions By Equipment Type

## 4.9.1. Unmitigated

Equipmen t Type	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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)

Equipmen t Type	ROG	NOx	со		PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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

		(,,			,		(	·,		,						
Vegetation	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	ROG	NOx		SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

										,						
Vegetation	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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)

		` ,	<b>J</b> ,	,			` ,		,							
Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

		(	· <b>J</b> , · · ·		,		(	· <b>J</b> /	. ,	/						
Species	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Removed																	
Removed	Sequester	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal — — — — — — — — — — — — — — — — — — —	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter   Daily, Winte	Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)  Avoided — — — — — — — — — — — — — — — — — —	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winter (Max) Avoided — — — — — — — — — — — — — — — — — —	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal         -<	Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed         - <t< td=""><td>Avoided</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td></t<>	Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ed	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed         — </td <td>Sequester ed</td> <td>_</td>	Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal         —<	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual — — — — — — — — — — — — — — — — — — —	Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual — — — — — — — — — — — — — — — — — — —	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided — — — — — — — — — — — — — — — — — —	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal         —<	Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed       — <t< td=""><td>Avoided</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td></t<>	Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ed   </td <td>Subtotal</td> <td>_</td>	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed — — — — — — — — — — — — — — — — — — —	Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal — — — — — — — — — — — — — — — — — — —	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
Site Preparation	Site Preparation	1/6/2025	1/17/2025	5.00	10.0	_
Grading	Grading	1/20/2025	2/14/2025	5.00	20.0	_
Building Construction	Building Construction	2/17/2025	11/21/2025	5.00	200	_
Paving	Paving	11/24/2025	12/12/2025	5.00	15.0	_
Architectural Coating	Architectural Coating	12/15/2025	1/2/2026	5.00	15.0	_

# 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
Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Tier 3	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 3	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 3	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backh oes	Diesel	Tier 3	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 3	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 3	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backh oes	Diesel	Tier 3	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 3	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Tier 3	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 3	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 3	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
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
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	Tier 3	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backh oes	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
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	_	4.00	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	20.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	_	4.00	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	148	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	57.6	4.00	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	_	4.00	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	29.5	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	4.00	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
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	_	4.00	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	20.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	_	4.00	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	148	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	57.6	4.00	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	_	4.00	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	29.5	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	4.00	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

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

# 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	0.00	0.00	527,340	175,780	5,828

# 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)
Site Preparation	_	_	15.0	0.00	_
Grading	_	_	60.0	0.00	_
Paving	0.00	0.00	0.00	0.00	2.23

## 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
Industrial Park	0.00	0%
Parking Lot	2.23	100%

# 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	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
Industrial Park	587	587	587	214,293	3,063	3,063	3,063	1,118,007
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
Industrial Park	587	587	587	214,293	3,063	3,063	3,063	1,118,007
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

#### 5.10.1.2. Mitigated

#### 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	527,340	175,780	5,828

#### 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)

· · · · · · · · · · · · · · · · · ·		\ J /			
Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	8,242,809	204	0.0330	0.0040	14,040,986
Parking Lot	85,094	204	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)
Industrial Park	8,242,809	204	0.0330	0.0040	14,040,986
Parking Lot	85,094	204	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)	
Industrial Park	81,298,250	448,468	
Parking Lot	0.00	0.00	

#### 5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	81,298,250	448,468
Parking Lot	0.00	0.00

# 5.13. Operational Waste Generation

## 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	436	_
Parking Lot	0.00	_

## 5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	436	_

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
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

## 5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	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
111 1 21 21 1	71			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

## 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 Dev	Hours per Voor	Horoopowor	Load Factor
Equipment type	ruei 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

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

Т	ree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1			

# 8. User Changes to Default Data

Screen	Justification
Land Use	The proposed project would divide the 42-acre project site into 26 lots, which would be developed with light industrial uses. The lots would include office, warehouse, retail uses, and truck maintenance building. Future tenants have not be identified. Additionally, 2.23 acres of parking would be provided including, employee, guest, and truck parking stalls.
Construction: Construction Phases	Construction of the proposed project is anticipated to occur over a total 12-month period starting January 2025, and ending January 2026.
Construction: Off-Road Equipment	Assuming use of Tier 3 construction equipment consistent with information provided by Project Applicant.
Operations: Vehicle Data	The proposed project would generate 691 average daily trips, including 517 passenger cars, 38 two-axle trucks, 31 three-axle trucks, and 105 four+-axle trucks. All four+-axle trips are evaluated in a separate model run.
Operations: Fleet Mix	Revised fleet mix to reflect 517 passenger cars (50% LDA, 25% LDT1, 25% LDT2), 38 two-axle trucks (100% MDV), 31 three-axle trucks (100% MHD), and 105 four+-axle trucks. All four+-axle trips are evaluated in a separate model run.

# East Huntsman Avenue Industrial Park Project - Heavy Heavy Duty Truck Trips Custom Report

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East Huntsman Avenue Industrial Park Project - Heavy Heavy Duty Truck Trips Custom Report, 10/17/2023

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

8. User Changes to Default Data

# 1. Basic Project Information

# 1.1. Basic Project Information

Data Field	Value
Project Name	East Huntsman Avenue Industrial Park Project - Heavy Heavy Duty Truck Trips
Operational Year	2026
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	31.4
Location	20349 E Huntsman Ave, Reedley, CA 93654, USA
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2511
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.20

# 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
Industrial Park	352	1000sqft	39.8	351,560	32,670	_	_	_

Parking Lot	705	Space	2.23	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

## 2.4. 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)

1 los /N 414	DOC	NOv			DM40E	DM40D	DMAOT	DM2.55	DM2.5D	DMO ET	DCC0	NDCOO	COST	CUA	NOO	0000
Un/Mit.	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	10.9	19.4	21.5	0.16	0.57	3.84	4.41	0.55	1.03	1.59	391	23,612	24,002	40.9	2.73	25,964
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	8.40	20.3	6.23	0.16	0.55	3.84	4.38	0.53	1.03	1.57	391	23,553	23,944	40.9	2.73	25,873
Average Daily (Max)	_	_	_	_	_	_	_	_	_		_	_	_		_	_
Unmit.	9.64	20.1	13.7	0.16	0.56	3.78	4.34	0.54	1.02	1.56	391	23,582	23,972	40.9	2.73	25,915
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1.76	3.66	2.51	0.03	0.10	0.69	0.79	0.10	0.19	0.28	64.7	3,904	3,969	6.77	0.45	4,290

## 2.5. Operations Emissions by Sector, Unmitigated

Sector	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	-	_	-	_	_	_	_	_	_	_	_	_	-	_
Mobile	0.22	15.5	3.02	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,215	14,215	0.26	2.25	14,925
Area	10.5	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	10.9	19.4	21.5	0.16	0.57	3.84	4.41	0.55	1.03	1.59	391	23,612	24,002	40.9	2.73	25,964
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.20	16.5	3.06	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,220	14,220	0.26	2.25	14,897
Area	7.98	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	8.40	20.3	6.23	0.16	0.55	3.84	4.38	0.53	1.03	1.57	391	23,553	23,944	40.9	2.73	25,873
Average Daily	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Mobile	0.21	16.2	3.04	0.13	0.26	3.78	4.04	0.25	1.02	1.26	_	14,217	14,217	0.26	2.25	14,908
Area	9.22	0.06	7.54	< 0.005	0.01	_	0.01	0.01	_	0.01	_	31.0	31.0	< 0.005	< 0.005	31.1
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	<u> </u>	<u> </u>	_	_	_	91.5

Total	9.64	20.1	13.7	0.16	0.56	3.78	4.34	0.54	1.02	1.56	391	23,582	23,972	40.9	2.73	25,915
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.04	2.96	0.55	0.02	0.05	0.69	0.74	0.05	0.19	0.23	_	2,354	2,354	0.04	0.37	2,468
Area	1.68	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15
Energy	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	1,516	1,516	0.19	0.02	1,525
Water	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141
Waste	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	15.2
Total	1.76	3.66	2.51	0.03	0.10	0.69	0.79	0.10	0.19	0.28	64.7	3,904	3,969	6.77	0.45	4,290

# 2.6. Operations Emissions by Sector, Mitigated

Sector	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.22	15.5	3.02	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,215	14,215	0.26	2.25	14,925
Area	10.5	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	10.9	19.4	21.5	0.16	0.57	3.84	4.41	0.55	1.03	1.59	391	23,612	24,002	40.9	2.73	25,964
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.20	16.5	3.06	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,220	14,220	0.26	2.25	14,897
Area	7.98	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213

Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	<u> </u>	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	8.40	20.3	6.23	0.16	0.55	3.84	4.38	0.53	1.03	1.57	391	23,553	23,944	40.9	2.73	25,873
Average Daily	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_
Mobile	0.21	16.2	3.04	0.13	0.26	3.78	4.04	0.25	1.02	1.26	_	14,217	14,217	0.26	2.25	14,908
Area	9.22	0.06	7.54	< 0.005	0.01	<u> </u>	0.01	0.01	_	0.01	_	31.0	31.0	< 0.005	< 0.005	31.1
Energy	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	9,154	9,154	1.15	0.10	9,213
Water	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Waste	_	_	_	_	_	<u> </u>	_	_	_	_	235	0.00	235	23.5	0.00	822
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	9.64	20.1	13.7	0.16	0.56	3.78	4.34	0.54	1.02	1.56	391	23,582	23,972	40.9	2.73	25,915
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.04	2.96	0.55	0.02	0.05	0.69	0.74	0.05	0.19	0.23	_	2,354	2,354	0.04	0.37	2,468
Area	1.68	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15
Energy	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	1,516	1,516	0.19	0.02	1,525
Water	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141
Waste	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136
Refrig.	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	15.2
Total	1.76	3.66	2.51	0.03	0.10	0.69	0.79	0.10	0.19	0.28	64.7	3,904	3,969	6.77	0.45	4,290

# 4. Operations Emissions Details

# 4.1. Mobile Emissions by Land Use

## 4.1.1. Unmitigated

Land Use	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.22	15.5	3.02	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,215	14,215	0.26	2.25	14,925
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.22	15.5	3.02	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,215	14,215	0.26	2.25	14,925
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.20	16.5	3.06	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,220	14,220	0.26	2.25	14,897
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.20	16.5	3.06	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,220	14,220	0.26	2.25	14,897
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.04	2.96	0.55	0.02	0.05	0.69	0.74	0.05	0.19	0.23	_	2,354	2,354	0.04	0.37	2,468
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.04	2.96	0.55	0.02	0.05	0.69	0.74	0.05	0.19	0.23	_	2,354	2,354	0.04	0.37	2,468

# 4.1.2. Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.22	15.5	3.02	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,215	14,215	0.26	2.25	14,925

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.22	15.5	3.02	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,215	14,215	0.26	2.25	14,925
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.20	16.5	3.06	0.13	0.26	3.84	4.10	0.25	1.03	1.28	-	14,220	14,220	0.26	2.25	14,897
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Total	0.20	16.5	3.06	0.13	0.26	3.84	4.10	0.25	1.03	1.28	_	14,220	14,220	0.26	2.25	14,897
Annual	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.04	2.96	0.55	0.02	0.05	0.69	0.74	0.05	0.19	0.23	_	2,354	2,354	0.04	0.37	2,468
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.04	2.96	0.55	0.02	0.05	0.69	0.74	0.05	0.19	0.23	_	2,354	2,354	0.04	0.37	2,468

# 4.2. Energy

## 4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use						PM10D	PM10T				BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	4,607	4,607	0.75	0.09	4,652
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	47.6	47.6	0.01	< 0.005	48.0
Total	_	_	_	_	_	_	_	_	_	_	_	4,654	4,654	0.75	0.09	4,700

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	4,607	4,607	0.75	0.09	4,652
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	47.6	47.6	0.01	< 0.005	48.0
Total	_	_	_	_	_	_	_	_	_	_	_	4,654	4,654	0.75	0.09	4,700
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	763	763	0.12	0.01	770
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	7.87	7.87	< 0.005	< 0.005	7.95
Total	_	_	_	_	_	_	_	_	_	_	_	771	771	0.12	0.02	778

## 4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	ROG	NOx	СО	SO2			PM10T	1		PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	4,607	4,607	0.75	0.09	4,652
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	47.6	47.6	0.01	< 0.005	48.0
Total	_	_	_	_	_	_	_	_	_	_	_	4,654	4,654	0.75	0.09	4,700
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	4,607	4,607	0.75	0.09	4,652

Parking Lot	_	_	_	_	_	_	_	_	_	_	_	47.6	47.6	0.01	< 0.005	48.0
Total	_	_	_	_	_	_	_	_	_	_	_	4,654	4,654	0.75	0.09	4,700
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	763	763	0.12	0.01	770
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	7.87	7.87	< 0.005	< 0.005	7.95
Total	_	_	_	_	_	_	_	_	_	_	_	771	771	0.12	0.02	778

## 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ndustrial Park	0.21	3.77	3.17	0.02	0.29		0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ndustrial Park	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Parking ₋ot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.21	3.77	3.17	0.02	0.29	-	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
ndustrial Park	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	745	745	0.07	< 0.005	747

Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	745	745	0.07	< 0.005	747

## 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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Industrial Park	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.21	3.77	3.17	0.02	0.29	_	0.29	0.29	_	0.29	_	4,500	4,500	0.40	0.01	4,512
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	745	745	0.07	< 0.005	747
Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.04	0.69	0.58	< 0.005	0.05	_	0.05	0.05	_	0.05	_	745	745	0.07	< 0.005	747

# 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Source	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	7.53	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landscap e Equipmen t		0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1
Total	10.5	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	7.53	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	7.98	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	1.37	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.08	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Landscap	0.23	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15
Equipmen t																
Total	1.68	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15

## 4.3.2. Mitigated

Source	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	7.53	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architectu ral Coatings	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landscap e Equipmen t		0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02		62.9	62.9	< 0.005	< 0.005	63.1
Total	10.5	0.13	15.3	< 0.005	0.03	_	0.03	0.02	_	0.02	_	62.9	62.9	< 0.005	< 0.005	63.1
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	7.53	_	-	_	_	_	-	-	_	_	_	_	-	_	_	_
Architectu ral Coatings	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	7.98	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consumer Products	1.37	_	_	_	_	_	_	18 / 37	_	_	_	_	_	_	_	_

Architectu Coatings	0.08	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landscap e Equipmen t		0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15
Total	1.68	0.01	1.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.13	5.13	< 0.005	< 0.005	5.15

# 4.4. Water Emissions by Land Use

## 4.4.1. Unmitigated

			J. G.Gy, tt						, ,							
Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Parking Lot	_	_	_	_	_	_	_	_	_		0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141

Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141

### 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	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Parking Lot	_	_	_	_	_	_	_	_	_	-	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	156	180	335	16.0	0.38	850
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	25.8	29.7	55.5	2.65	0.06	141

# 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)

			<b>,</b> , , , ,	,												
Land Use	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136

### 4.5.2. Mitigated

		I NIOw	100				LDMAOT			DMO ET		LNDCCO	LCCOT	I CLIA	LNIOO	1000-
rano use i	IKUG	HNUX	ICO	150/	IPIVITUE	PIVITUD	IPIVITOI	I PIVIZ.5E	IPIVIZ.5D	IPIVIZ.5 I	BCO2	INBCOZ	160/1	1UH4	INZO	iCOze i
							1							1 ~	•	

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	235	0.00	235	23.5	0.00	822
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136
Parking Lot	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	38.9	0.00	38.9	3.89	0.00	136

# 4.6. Refrigerant Emissions by Land Use

## 4.6.1. Unmitigated

		` ,					` ,	3,								
Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer																
(Max)																

Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_		_	_	_	_	_	_	_	91.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_		_	_	15.2
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	15.2

## 4.6.2. Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	91.5
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Industrial Park	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	15.2

Total	_	<del>-</del>	_	_	_	_	_	_	_	_	_	_		_		15.2

# 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)

Emiliana an	DOO								DMO 5D		DOO0	NDOOG	СООТ	OLIA	Noo	000-
Equipmen	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Туре																
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-

## 4.7.2. Mitigated

Equipmen	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Туре																
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)

Equipmen t	ROG	NOx	со	SO2	PM10E						BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Туре																
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.8.2. Mitigated

Equipmen t	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Туре																
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)

Equipmen t Type	ROG		СО		PM10E	PM10D		PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.9.2. Mitigated

		(	·,		,		(,)		.,,	,						
Equipmen	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
t																
Туре																

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		NOx	со		PM10E			1			BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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

la company de la company d	DO0	Luc		000	DIMAGE	DIMAGE	DIMAGE	DIAO EE	DIAO ED	DMO ET	1000	LIBOOO	LOCAT	10114	NOO	
II and Use I	ROG	INOX	TCO	1802	IPM10E	IPM10D	IPM101	TPM2.5E	1PM2.5D	IPM251	BCO2	INBCO2	TCO2T	ICH4	INZO	TCO2e
Lana 000		ITTOX		002	1	1	1	11112.02	1 1112.02	1. 11.2.0	1000	1.12002	002.	• • • • • • • • • • • • • • • • • • •	1.1-0	10020

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

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

			co								BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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)

		` ,	<b>.</b> .	,	,		` ,		,	,						
Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	ROG	NOx	СО		PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	_	_		_	_	_	_		_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Industrial Park	105	105	105	38,368	4,205	4,205	4,205	1,534,700
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
Industrial Park	105	105	105	38,368	4,205	4,205	4,205	1,534,700
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

5.10.1.2. Mitigated

### 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	527,340	175,780	5,828

### 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)
Industrial Park	8,242,809	204	0.0330	0.0040	14,040,986
Parking Lot	85,094	204	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)
Industrial Park	8,242,809	204	0.0330	0.0040	14,040,986
Parking Lot	85,094	204	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)
Industrial Park	81,298,250	448,468
Parking Lot	0.00	0.00

#### 5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)	
Industrial Park	81,298,250	448,468	
Parking Lot	0.00	0.00	

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	436	_
Parking Lot	0.00	_

### 5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	436	_
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
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

#### 5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	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	
5.15.2. 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 B	oilers						
Equipment Type	Fuel Type	Number	Boiler Ratir	g (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)	
5.17. User Defin	ned						
Equipment Type			Fuel Type				
5.18. Vegetation	า						
E 10 1 Land Llag	Changa						

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

Riomace Cover Type	Initial Acres	Final Acres
Biomass Cover Type	Illinai Acres	Filial 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)
nee type	Number	Liectricity Saved (KWII/year)	ivatural das daveu (blu/year)

# 8. User Changes to Default Data

Screen	Justification
Land Use	The proposed project would divide the 42-acre project site into 26 lots, which would be developed with light industrial uses. The lots would include office, warehouse, retail uses, and truck maintenance building. Future tenants have not be identified. Additionally, 2.23 acres of parking would be provided including, employee, guest, and truck parking stalls.
Construction: Construction Phases	Construction of the proposed project is anticipated to occur over a total 12-month period starting January 2025, and ending January 2026.
Construction: Off-Road Equipment	Assuming use of Tier 3 construction equipment consistent with information provided by Project Applicant.
Operations: Vehicle Data	The proposed project would generate 105 four+-axle trucks. This analysis assumes trucks would travel 40 miles.

Operations: Fleet Mix

Revised fleet mix to reflect all four+-axle trips.

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