CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: April 11, 2024

TO: Michael Goodwin, First Industrial, L.P.

FROM: Ronald Brugger, Senior Air Quality Specialist

SUBJECT: Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed First Hathaway Logistics Warehouse Project (SCH # 2022040441; Project # DR 21-7015; ENV 21-1519; TPM 21 – 4002) in Banning, California

INTRODUCTION

This air quality and greenhouse gas (GHG) emissions impact analysis for the proposed First Hathaway Logistics Warehouse Project (project) in the eastern portion of the City of Banning (City), in western Riverside County, California, has been prepared using methods and assumptions recommended in the South Coast Air Quality Management District's (SCAQMD) *CEQA Air Quality Handbook* (SCAQMD 1993). This analysis includes a description of existing regulatory framework, an assessment of project operational air quality emissions, GHG emissions, and energy use. Measures to reduce or eliminate significant impacts are identified, where appropriate. All references used in this analysis are provided in Attachment A.

PROJECT LOCATION

The approximately 94.86-acre project site is located southeast of the North Hathaway Street and Morongo Road intersection in the City of Banning, Riverside County. The project site is composed of six parcels (Assessor's Parcel Numbers [APNs] 532-110-001, -002, -003, -008, -009, and -010) and does not require a General Plan Amendment or a Zone Change, as the proposed warehouse development is a permitted use in the existing Business Park (BP) land use and zoning designation. Figure 1 shows the project location and vicinity (all figures are provided in Attachment B). Figure 2 shows the surrounding land uses and sensitive receptors.

PROJECT DESCRIPTION

The proposed project includes the construction of a 1,420,722-square-foot (sf) warehouse distribution building with truck docks, trailer parking and passenger car parking, and associated improvements, including the construction of Nicolet Street, Wilson Street, and a new First Industrial Way along the east side of the project site connecting Nicolet Street and Wilson Street. The main building would be accessed by five driveways, three located on the extension of Nicolet Street, one on Hathaway Street, and one on the extension of Wilson Street. There would be two parcels located on the south side of the extension of Nicolet Street, one of which would be used for passenger vehicle parking with two driveways on Nicolet Street and the other which would be used for trailer parking with two driveways located on Nicolet Street. Thirty percent of the onsite parking would be

constructed with electrical conduit stubs for future charging equipment and 10 percent would be constructed with electric vehicle chargers. Figure 3 shows the conceptual site plan. It is expected that construction of the project would begin toward the end of 2024 and be completed in approximately 18 months.

SENSITIVE RECEPTORS AND LAND USES IN THE PROJECT VICINITY

Sensitive receptors include residences such as private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, in-home daycares, health facilities such as hospitals, long-term care facilities, retirement and nursing homes, community centers, places of worship, parks (excluding trails*),* prisons, and dormitories. The site is bounded by Hathaway Street to the west, undeveloped land to the north, east, and south, and a Caltrans facility along a portion of the site boundary to the south, as shown in Figure 2. The nearest sensitive receptors in proximity to the project site are single-family homes to the west of Hathaway Street and south of George Street and multi-family homes to the west of Hathaway Street and north of George Street as close as approximately 75 feet from the project site boundary and approximately 40 feet from the Hathaway Street roadway construction limits. (All distances are from the project site boundary or roadway construction limits to the identified building.)

ENVIRONMENTAL SETTING

Air Quality Background

Air quality is primarily a function of local climate, local sources of air pollution, and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and, for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and therefore are used to determine the boundary of air basins. The project site is in the City of Banning, Riverside County, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of SCAQMD. This Basin includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. As detailed in Table A, these pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns in size (PM_{10}), particulate matter less than 2.5 microns in size ($PM_{2.5}$), and lead. In addition, the State has set standards for sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Air quality in the planning area is affected not only by various emission sources (e.g., mobile and industry) but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Basin is primarily influenced by a wide range of emissions sources—such as dense population centers, heavy vehicular traffic, and industry—and meteorology.

Table A: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
O_3[8]	1-Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})[9]	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter ($PM_{2.5}$)[9]	24-Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
CO	1-Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
NO_2[10]	1-Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
SO_2[11]	1-Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3-Hour	—		—	0.5 ppm (1,300 µg/m³)	
	24-Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30-Day Average	1.5 µg/m³	Atomic Absorption	—	—	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[13]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility-Reducing Particles[14]	8-Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Source: CARB *Ambient Air Quality Standards*. May 4, 2016. Website: www.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf (accessed February 2023).

Footnotes are provided on the following page.

[1] California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1- and 24-hour), NO_2, and PM (PM_{10}, $PM_{2.5}$, and visibility-reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded. California AAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than for O_3 and PM and those based on the annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the EPA for further clarification and current national policies.

[3] Concentration expressed first in the units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent measurement method that can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] The reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

[8] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated as Nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard, the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated as Nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standards are approved.

[14] In 1989, CARB converted both the general statewide 10 mi visibility standard and the Lake Tahoe 30 mi visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

°C = degrees Celsius
µg/m^3 = micrograms per cubic meter
AAQS = ambient air quality standards
CARB = California Air Resources Board
CO = carbon monoxide
EPA = United States Environmental Protection Agency
mg/m^3 = milligrams per cubic meter
mi = mile/miles
NO_2 = nitrogen dioxide
O_3 = ozone
PM = particulate matter
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ppb = parts per billion
ppm = parts per million
SO_2 = sulfur dioxide

The City of Banning is nestled between San Gorgonio and San Jacinto Mountains. Banning is categorized as a subtropical desert climate type and Banning's climate is generally hot summers and cloudy winters, and infrequent seasonal rainfall. Average annual precipitation is 18.34 inches. The climatological station closest to the site is Beaumont COOP.

Table B summarizes the most common health and environmental effects for each of the air pollutants for which there is a national and/or California AAQS, as well as for toxic air contaminants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (by the United States Environmental Protection Agency [EPA]), these health effects would not occur unless the standards are exceeded by a large margin or for a prolonged period of time. State AAQS are typically more stringent than federal AAQS. Among the pollutants, O_3 and particulate matter ($PM_{2.5}$ and PM_{10}) are considered pollutants with regional effects, while the others have more localized effects (CARB 2022).

The California Clean Air Act (CCAA) provides SCAQMD and other air districts with the authority to manage transportation activities at indirect sources. Indirect sources of pollution include any facility, building, structure, or installation, or combination thereof, that attracts or generates mobile-source emissions of any pollutant. In addition, area-source emissions that are generated when minor sources collectively emit a substantial amount of pollution are also managed by the local air districts. Examples of this would be the motor vehicles at an intersection, at a mall, and on highways. SCAQMD also regulates stationary sources of pollution throughout its jurisdictional area. The California Air Resources Board (CARB) regulates direct emissions from motor vehicles.

Air Pollution Constituents and Attainment Status

CARB coordinates and oversees both State and federal air pollution control programs in the State. CARB oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the EPA and local air districts. CARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these stations are used by CARB and the EPA to classify air basins as Attainment, Nonattainment, Nonattainment-Transitional, or Unclassified, based on air quality data for the most recent three calendar years compared with the AAQS.

Attainment areas may be the following:

- **Attainment/Unclassified** ("Unclassifiable" in some lists): These basins have never violated the air quality standard of interest or do not have enough monitoring data to establish Attainment or Nonattainment status.

- **Attainment-Maintenance** (national ambient air quality standards [NAAQS] only): These basins violated a NAAQS that is currently in use (were Nonattainment) in or after 1990, but now attain the standard and are officially redesignated as Attainment by the EPA with a Maintenance State Implementation Plan (SIP).

Table B: Summary of Health and Environmental Effects of the Criteria Air Pollutants

Pollutant	Effects on Health and the Environment
Ozone (O_3)	• Respiratory symptoms • Worsening of lung disease leading to premature death • Damage to lung tissue • Crop, forest and ecosystem damage • Damage to a variety of materials, including rubber, plastics, fabrics, paint and metals
$PM_{2.5}$ (particulate matter less than 2.5 microns in aerodynamic diameter)	• Premature death • Hospitalization for worsening of cardiovascular disease • Hospitalization for respiratory disease • Asthma-related emergency room visits • Increased symptoms, increased inhaler usage
PM_{10} (particulate matter less than 10 microns in aerodynamic diameter)	• Premature death & hospitalization, primarily for worsening of respiratory disease • Reduced visibility and material soiling
Nitrogen oxides (NO_X)	• Lung irritation • Enhanced allergic responses
Carbon monoxide (CO)	• Chest pain in patients with heart disease • Headache • Light-headedness • Reduced mental alertness
Sulfur oxides (SO_X)	• Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits
Lead	• Impaired mental functioning in children • Learning disabilities in children • Brain and kidney damage
Hydrogen sulfide (H_2S)	• Nuisance odor (rotten egg smell) • At high concentrations: headache & breathing difficulties
Sulfate	• Same as $PM_{2.5}$, particularly worsening of asthma and other lung diseases • Reduces visibility
Vinyl chloride	• Central nervous system effects, such as dizziness, drowsiness & headaches • Long-term exposure: liver damage & liver cancer
Visibility reducing particles	• Reduced airport safety, scenic enjoyment, road safety, and discourages tourism
Toxic air contaminants (TACs): about 200 chemicals have been listed as TACs.	• Cancer • Reproductive and developmental effects • Neurological effects

Source: Common Air Pollutants (CARB n.d.-a) (accessed February 2023).
CARB = California Air Resources Board

- **Attainment** (usually only for California ambient air quality standards [CAAQS], but sometimes for NAAQS): These basins have adequate monitoring data to show attainment, have never been Nonattainment, or, for NAAQS, have completed the official Maintenance period.

Nonattainment areas are imposed with additional restrictions as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards. Table C lists the attainment status for the criteria pollutants in the Basin.

Table C: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3	Nonattainment (1-hour) Nonattainment (8-hour)	Extreme Nonattainment (1-hour) Extreme Nonattainment (8-hour)
PM_{10}	Nonattainment (24-hour) Nonattainment (Annual)	Attainment-Maintenance (24-hour)
$PM_{2.5}$	Nonattainment (Annual)	Serious Nonattainment (24-hour) Moderate Nonattainment (Annual)
CO	Attainment (1-hour) Attainment (8-hour)	Attainment-Maintenance (1-hour) Attainment-Maintenance (8-hour)
NO_2	Attainment (1-hour) Attainment (Annual)	Attainment/Unclassified (1-hour) Attainment-Maintenance (Annual)
SO_2	Attainment (1-hour) Attainment (24-hour)	Attainment/Unclassified (1-hour) Attainment/Unclassified (Annual)
Lead[1]	Attainment (30-day average)	Attainment (3-month rolling)
All Others	Attainment/Unclassified	N/A

Source: *National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin* (SCAQMD). Website:www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf (accessed February 2023).

[1] Only the Los Angeles County portion of the Basin is in nonattainment for lead.

CO = carbon monoxide
N/A = not applicable
NO_2 = nitrogen dioxide
O_3 = ozone
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SO_2 = sulfur dioxide

Local Air Quality

SCAQMD, together with CARB, maintains ambient air quality monitoring stations. The air quality monitoring station that monitors air pollutant data closest to the site is the Banning Airport Station at 200 S. Hathaway Street, Banning California, approximately 0.50 mile south of the project site. This site only monitors ozone, PM_{10}, and NO_2. The closest air quality monitoring station that monitors $PM_{2.5}$ is on the Morongo Reservation at 12160 Santiago Road, approximately 3.25 miles northeast of the project site. The closest air quality monitoring station that monitors CO is the Palm Springs Station at FS-590 Racquet Club Avenue, approximately 20 miles east of the project site. The air quality trends from these stations are used to represent the ambient air quality in the project area. The ambient air quality data in Table D show that NO_2 and CO levels are below the applicable State and federal standards. However, PM_{10} and O_3 levels frequently exceed their respective standards, and $PM_{2.5}$ levels occasionally exceed the federal 24-hour standard.

Table D: Air Quality Concentrations in the Project Vicinity

Pollutant	Standard	2019	2020	2021
CO (Measured at the Palm Springs Monitoring Station)				
Maximum 1-hour concentration (ppm)		1.3	0.8	0.8
No. of days exceeded	State: 20 ppm	0	0	0
	Federal: 35 ppm	0	0	0
Maximum 8-hour concentration (ppm)		0.7	0.5	0.4
No. of days exceeded	State: 9 ppm	0	0	0
	Federal: 9 ppm	0	0	0
O_3 (Measured at the Banning Airport)				
Maximum 1-hour concentration (ppm)		0.119	0.150	0.139
No. of days exceeded	State: 0.09 ppm	24	29	41
Max 8-hr concentration (ppm)		0.096	0.115	0.116
No. of days exceeded	State: 0.07 ppm	62	71	82
	Federal: 0.07 ppm	59	68	80
PM_{10} (Measured at the Banning Airport)				
Maximum 24-hour concentration (µg/m³)		63.8	69.3	48.6
No. of days exceeded	State: 50 µg/m³	2	1	0
	Federal: 150 µg/m³	0	0	0
Annual avg. concentration (µg/m³)		17.7	21.2	21.2
Exceeds Standard?	State: 20 µg/m³	No	Yes	Yes
$PM_{2.5}$ (Measured at the Morongo Air Monitoring Station)				
Maximum 24-hour concentration (µg/m³)		11.5	6.7	24.2
No. of days exceeded	Federal: 35 µg/m³	0	0	0
Annual avg. concentration (µg/m³)		5.6	3.8	7.0
Exceeds Standard?	State: 12 µg/m³	No	No	No
	Federal: 12 µg/m³	No	No	No
NO_2 (Measured at the Banning Airport)				
Maximum 1-hour concentration (ppb):		56.0	51.1	56.8
No. of days exceeded	State: 180 ppb	0	0	0
	Federal: 100 ppb	0	0	0
Annual avg. concentration (ppb):		21.7	23.5	24.6
Exceeds standard?	State: 30 ppb	No	No	No
	Federal: 53 ppb	No	No	No

Sources: Air Data: EPA Air Quality Data Collected at Outdoor Monitors across the U.S.; and CARB's iADAM
Notes: Data were collected from the closest stations to the project site where each criteria pollutant was available.
µg/m³ = micrograms per cubic meter
CARB = California Air Resources Board
CO = carbon monoxide
EPA = United States Environmental Protection Agency
NO_2 = nitrogen dioxide
O_3 = ozone
$PM_{2.5}$ = particulate matter smaller than 2.5 microns in size
PM_{10} = particulate matter smaller than 10 microns in size
ppb = parts per billion
ppm = parts per million

Greenhouse Gas Background

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change are the following:[1]

[1] The greenhouse gases listed are consistent with the definition in Assembly Bill 32 (Government Code 38505), as discussed later in this document.

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF_6)

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 can cause global warming. Although GHGs produced by human activities include naturally occurring GHGs (e.g., CO_2, CH_4, and N_2O), some gases (e.g., HFCs, PFCs, and SF_6) are completely new to the atmosphere. Water vapor is a GHG, but it is generally excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes (e.g., oceanic evaporation). For the purposes of this air quality study, the term "GHGs" will refer collectively to the six gases identified in the bulleted list provided above.

These GHGs 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 in absorbing 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_2, 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_2 over a specified time period. For example, N_2O is from 265 to 310 times more potent at contributing to global warming than CO_2. GHG emissions are typically measured in terms of metric tons of CO_2 equivalents (MT CO_2e). Table E identifies the GWP for the three GHGs analyzed in this report.

Table E: Global Warming Potential for Selected Greenhouse Gases

Pollutant	AR4 Values	AR6 Values
Carbon dioxide (CO_2)	1 (by definition)	1 (by definition)
Methane (CH_4)	25	29.8 ± 11
Nitrous oxide (N_2O)	298	273 ± 130

Source 1: California Air Resources Board (CARB). 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*.
Source 2: Intergovernmental Panel on Climate Change (IPCC). 2021. Sixth Assessment Report.
Note: The EPA and CARB use global warming potential values from the IPCC Fourth Assessment Report (2007).
AR4 = 2007 IPCC Fourth Assessment Report
AR6 = 2021 IPCC Sixth Assessment Report
EPA = United States Environmental Protection Agency

REGULATORY SETTING

This section provides regulatory background information for air quality and GHG emissions.

Air Quality

Federal Regulations

The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and set deadlines for their attainment. The CAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required for areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

State Regulations

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for CO, O_3, SO_2, and NO_2 by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

The California Air Resources Board (CARB) is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Regional Regulations

SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. SCAQMD prepares a new AQMP every 3 years, updating the previous plan and a 20-year horizon.

The latest plan is the 2022 AQMP (SCAQMD 2022), adopted December 2, 2022. On October 1, 2015, the EPA strengthened the NAAQS for ground-level ozone, lowering the primary and secondary ozone standard levels to 70 parts per billion (ppb). The Basin is classified as an "extreme" nonattainment area, and the Coachella Valley is classified as a "severe-15" nonattainment area for the 2015 Ozone NAAQS. The 2022 AQMP was developed to address the requirements for meeting this standard.

The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NO_X

technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to project construction or operation. For example, SCAQMD Rule 403 requires the implementation of the best-available fugitive dust control measure during active construction periods capable of generating fugitive dust emissions from on-site earth-moving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Basin, such as the proposed project. Instead, SCAQMD published the *CEQA Air Quality Handbook* (SCAQMD 1993) to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects proposed in the Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in Environmental Impact Reports and was used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* (1993) with the *Air Quality Analysis Guidance Handbook* (SCAQMD n.d.).

To assist the CEQA practitioner in conducting an air quality analysis in the interim while the replacement *Air Quality Analysis Guidance Handbook* is being prepared, supplemental guidance/ information is provided on the SCAQMD website and includes (1) on-road vehicle emission factors, (2) background CO concentrations, (3) localized significance thresholds (LSTs), (4) mitigation measures and control efficiencies, (5) mobile-source toxics analysis, (6) off-road mobile-source emission factors, (7) $PM_{2.5}$ significance thresholds and calculation methodology, and (8) updated SCAQMD Air Quality Significance Thresholds. SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

The following SCAQMD rules and regulations would apply to the proposed project:

- SCAQMD Rule 403 (SCAQMD 2005) requires projects to incorporate fugitive dust control measures.

- SCAQMD Rule 1113 (SCAQMD 2016) limits the volatile organic compound (VOC) content of architectural coatings.

The proposed project would be required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. SCAQMD Rule 1113 limits the volatile organic compound (VOC) content of architectural coatings. Applicable dust suppression techniques from SCAQMD Rule 403 and low VOC content in paints under SCAQMD Rule 1113 are summarized below. Implementation of these dust suppression

techniques can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

- **SCAQMD Rule 403 Measures:**
    - Water active sites at least twice times daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).
    - All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet (ft) of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
    - Traffic speeds on all unpaved roads shall be reduced to 15 mph or less.
- **SCAQMD Rule 1113 Measures:** SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction and operation of the proposed project. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

Local Regulations

City of Banning General Plan. The Banning General Plan includes goals, policies and programs from the Environment Resources Chapter: Air Quality Element.

- **Goal 1:** To preserve and enhance local and regional air quality for the protection of the health and welfare of the community.
- **Policy 1:** The City shall be proactive in regulating local pollutant emitters and shall cooperate with the Southern California Association of Governments and the South Coast Air Quality Management District to assure compliance with air quality standards.
- **Policy 2:** The City shall continue to coordinate and cooperate with local, regional and federal efforts to monitor, manage and reduce the levels of major pollutants affecting the City and region, with particular emphasis on PM_{10} and ozone emissions, as well as other emissions associated with diesel-fueled equipment and motor vehicles.
- **Program 2.A:** On an on-going basis, the City shall continue to participate in efforts to monitor and control PM_{10} emissions from construction and other sources, and all other air pollutants of regional concern. The City shall coordinate with SCAQMD to provide all reporting data for the SCAQMD annual report.
- **Policy 3:** City land use planning efforts shall assure that sensitive receptors are separated from polluting point sources.

- **Policy 4:** Development proposals brought before the City shall be reviewed for their potential to adversely impact local and regional air quality and shall be required to mitigate any significant impacts.

Greenhouse Gas Emissions

This section describes regulations related to global climate change at the federal, State, and local level.

Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions; however, on April 2, 2007, the United States Supreme Court ruled that the EPA has the authority to regulate CO_2 emissions under the CAA. The Supreme Court ruled that GHGs fit within the CAA's definition of a pollutant and that the EPA did not have a valid rationale for not regulating GHGs. In December 2009, the EPA issued an endangerment finding for GHGs under the CAA.

On December 7, 2009, the EPA Administrator signed a final action under the CAA, finding that six GHGs (i.e., CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) constitute a threat to public health and welfare and that the combined emissions from motor vehicles cause and contribute to GCC.

On September 15, 2011, the EPA and the United States Department of Transportation (USDOT) issued the final rule for the first national standards to improve the fuel efficiency of medium- and heavy-duty trucks and buses, model years 2014 to 2018. For combination tractors, the agencies proposed engine and vehicle standards that would achieve up to a 20 percent reduction from model year 2014 in fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which would achieve up to a 10 percent reduction from model year 2014 for gasoline vehicles and a 15 percent reduction for diesel vehicles (12 and 17 percent, respectively, if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction from model year 2014 in fuel consumption. On October 25, 2016, the EPA and the USDOT issued Phase 2 of the national standards to improve fuel efficiency standards for medium- and heavy-duty trucks and buses for model years 2021 to 2027 to achieve vehicle fuel savings as high as 25 percent, depending on the vehicle category.

The current administration finalized updated Corporate Average Fuel Economy (CAFE) Standards for model years 2024 through 2026. The final rule establishes standards that would require an industry-wide fleet average of approximately 49 miles per gallon (mpg) for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024 and 2025, and 10 percent annually for model years 2026. The agency projects the final standards will save consumers nearly $1,400 in total fuel expenses over the lifetimes of vehicles produced in these model years and avoid the consumption of about 234 billion gallons of gas between model years 2030 to 2050. The National Highway Traffic Safety Administration (NHTSA) also projects that the standards will cut GHGs from the atmosphere, reduce air pollution, and reduce the country's dependence on oil.

State Agencies

California Air Resources Board. In 1967, the State Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus (i.e., the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board) to establish CARB. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to the State's air pollution problems. California adopted the CCAA in 1988. CARB administers the CAAQS for the 10 air pollutants designated in the CCAA. These 10 State air pollutants are the six criteria pollutants designated by the federal CAA as well as four others: visibility-reducing particulates, H_2S, sulfates, and vinyl chloride.

The California Global Warming Solutions Act of 2006, widely known as Assembly Bill (AB) 32, requires CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB was directed to set a statewide GHG emissions limit and set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

In 2016, the Legislature passed, and Governor Jerry Brown signed, Senate Bill (SB) 32 and AB 197. 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 Governor Brown's April 2015 Executive Order (EO) B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an IPCC analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million (ppm) CO_2e and reduce the likelihood of catastrophic impacts from climate change. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions.

CARB adopted the 2022 Scoping Plan Update on December 15, 2022. The 2022 Scoping Plan Update assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update 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.

Senate Bill 97 and *State CEQA Guidelines*. In August 2007, the Legislature adopted SB 97, requiring the Office of Planning and Research (OPR) to prepare and transmit new California Environmental Quality Act (CEQA) guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the California Natural Resources Agency. OPR submitted its proposed guidelines to the Secretary for Natural Resources on April 13, 2009, and the *State CEQA Guidelines* amendments became effective on March 18, 2010.

The *State CEQA Guidelines* amendments do not specify a threshold of significance for GHG emissions or prescribe assessment methodologies or specific mitigation measures. Instead, the amendments encourage lead agencies to consider many factors in performing a CEQA analysis but rely on the lead agencies in making their own significance determinations based upon substantial evidence. The

State CEQA Guidelines amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

The *State CEQA Guidelines* amendments require a lead agency to make a good-faith effort based on the extent possible on scientific and factual data to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The *State CEQA Guidelines* amendments give discretion to the lead agency whether to: (1) use a model or methodology to quantify GHG emissions resulting from a project and which model or methodology to use; and/or (2) rely on a qualitative analysis or performance-based standards. The California Natural Resources Agency is required to periodically update the guidelines to incorporate new information or criteria established by CARB pursuant to AB 32.

California Green Building Standards. The California Green Building Standards Code, which is Part 11 of the California Code of Regulations, is commonly referred to as the CALGreen Code. The first edition of the CALGreen Code was released in 2008 and contained only voluntary standards. The 2022 CALGreen Code was updated in 2022, became effective on January 1, 2023, and applies to non-residential and residential developments. The CALGreen Code contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The CALGreen Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The CALGreen Code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, function at their maximum efficiency. The proposed project would be subject to the 2022 CALGreen Code that became effective on January 1, 2022. Requirements of the 2022 CALGreen Code that are applicable to the proposed project include the following:

5.106.4 **Bicycle Parking.** Provide bicycle racks within 200 feet of the visitor's entrance for 5 percent of new visitor motorized vehicle parking spaces, with a minimum of one two-bike capacity rack.

5.106.5.3 **Electric Vehicle (EV) charging.** Provide EV infrastructure and facilitate EV charging in compliance with the California Building Code and the California Electrical Code. The number of EV capable spaces required are specified at approximately 20 percent of the total spaces. Provisions for medium- and heavy-duty EV spaces shall be included.

5.106.12 **Shade Trees.** Shade trees shall be planted to provide shade over 50 percent of the parking area within 15 years unless solar photovoltaic shade structures provide this shade.

5.303.3 **Water Conserving Plumbing Fixtures and Fittings.** All water fixtures shall comply with the California Code of Regulations, Title 20, (Appliance Efficiency Regulations), Section 1605.1(h)(4) and Section 1605.3(h)(4)(A).

5.304.1 **Outdoor Water Use.** Development shall comply with the City's water efficient landscape ordinance or the current California Department of Water Resources'

Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

5.408.1 **Construction Waste Management.** Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2, or 5.408.1.3, or meet the City's construction and demolition waste management ordinance, whichever is more stringent.

5.410.1 **Recycling by Occupants.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet the City's local recycling ordinance, whichever is more restrictive.

Regional Regulations

SCAG is a council of governments for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. SCAG is a regional planning agency and a forum for regional issues relating to transportation, the economy and community development, and the environment. Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality.

On September 3, 2020, the Regional Council of SCAG adopted Connect SoCal, also known as the *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability, and High Quality of Life* (a.k.a., 2020–2045 RTP/SCS). The 2020–2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions (CTCs), tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

The SCAQMD and SCAG are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. SCAQMD prepares a new AQMP every 3 years, updating the previous plan and a 20-year horizon.

The 2022 AQMP was adopted by SCAQMD on December 2, 2022 (SCAQMD 2022). The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NOx technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.

The control strategy for the 2022 AQMP includes aggressive new regulations and the development of incentive programs to support early deployment of advanced technologies. The two key areas for

incentive programs are (1) promoting widespread deployment of available ZE and low NOx technologies and (2) developing new ZE and ultra-low NOx technologies for use in cases where the technology is not currently available. South Coast AQMD will prioritize distribution of incentive funding in EJ areas and seek opportunities to focus benefits on the most disadvantaged communities. Cost-effectiveness and affordability will be further considered during the rulemaking or incentive program development process.

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to project construction or operation. For example, SCAQMD Rule 403 requires the implementation of the best-available fugitive dust control measure during active construction periods capable of generating fugitive dust emissions from on-site earthmoving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads.

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Basin, such as the proposed project. Instead, the SCAQMD published the *CEQA Air Quality Handbook* (SCAQMD 1993) and newer thresholds of significance to assist lead agencies, as well as consultants, project proponents, and other interested parties in evaluating potential air quality impacts of projects proposed in the Basin. The *CEQA Air Quality Handbook* and newer thresholds of significance provide standards, methodologies, and procedures for conducting air quality analyses in Environmental Impact Reports and were used extensively in the preparation of this analysis. SCAQMD is currently in the process of developing an *Air Quality Analysis Handbook* (SCAQMD n.d.) to replace the *CEQA Air Quality Handbook* (1993) but the date that the new Handbook will be completed and published is presently unknown.

To assist the CEQA practitioner in conducting an air quality analysis in the interim while the replacement *Air Quality Analysis Handbook* is being prepared, supplemental guidance/information is provided on the SCAQMD website and includes (1) on-road vehicle emission factors, (2) background CO concentrations, (3) localized significance thresholds (LSTs), (4) mitigation measures and control efficiencies, (5) mobile-source toxics analysis, (6) off-road mobile-source emission factors, (7) $PM_{2.5}$ significance thresholds and calculation methodology, and (8) updated SCAQMD Air Quality Significance Thresholds. SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the CalEEMod. These recommendations were followed in the preparation of this analysis.

The following SCAQMD rules and regulations would apply to the proposed project:

- SCAQMD Rule 403 requires projects to incorporate fugitive dust control measures (SCAQMD 2005).

- SCAQMD Rule 1113 limits the VOC content of architectural coatings (SCAQMD 2016a).

- SCAQMD Rule 2305, the Warehouse Indirect Source Rule, requires the owners and operators of warehouses greater than 100,000 square feet to directly reduce NOx and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. The warehouse rule is a menu-based points system requiring warehouse

operators to annually earn a specified number of points. These points can be earned by completing actions from a menu that can include acquiring and using natural gas, Near-Zero Emissions and/or Zero- Emissions on-road trucks, zero-emission cargo handling equipment, solar panels or zero-emission charging and fueling infrastructure, or other options. SCAQMD expects this rule to reduce emissions from warehouse uses by 10–15 percent.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the Basin. The Working Group developed several different options that are contained in the SCAQMD 2008 draft guidance document titled *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* (2008) that could be applied by lead agencies. On September 28, 2010, SCAQMD Working Group Meeting #15 provided further guidance, including a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. The SCAQMD has not presented a finalized version of these thresholds to the governing board.

SCAQMD identifies the emissions level for which a project would not be expected to substantially conflict with any State legislation adopted to reduce statewide GHG emissions. As such, the utilization of a service population represents the rates of emissions needed to achieve a fair share of the State's mandated emissions reductions. Overall, SCAQMD identifies a GHG efficiency level that, when applied statewide or to a defined geographic area, would meet the 2020 and post-2020 emission targets as required by AB 32 and SB 32. If projects are able to achieve targeted rates of emissions per the service population, the State would be able to accommodate expected population growth and achieve economic development objectives while also abiding by AB 32's emissions target and future post-2020 targets.

Local Regulations

City of Banning General Plan. The Banning General Plan includes goals, policies and programs from the Environment Resources Chapter: Air Quality Element that specify air quality but apply to GHG emissions.

> **Goal 1:** To preserve and enhance local and regional air quality for the protection of the health and welfare of the community.
>
> **Policy 1:** The City shall be proactive in regulating local pollutant emitters and shall cooperate with the Southern California Association of Governments and the South Coast Air Quality Management District to assure compliance with air quality standards.
>
> **Policy 2:** The City shall continue to coordinate and cooperate with local, regional and federal efforts to monitor, manage and reduce the levels of major pollutants affecting the City and region.
>
> **Policy 4:** Development proposals brought before the City shall be reviewed for their potential to adversely impact local and regional air quality and shall be required to mitigate any significant impacts.

THRESHOLDS OF SIGNIFICANCE

Certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analyses. SCAQMD's current guidelines, the *CEQA Air Quality Handbook* (SCAQMD 1993) with associated updates, were followed in this assessment of air quality and climate impacts for the proposed project.

Based on the *State CEQA Guidelines*, Appendix G (Public Resources Code Sections 15000–15387), a project would normally be considered to have a significant effect on air quality if the project would violate any CAAQS, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

Air Quality Thresholds

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (SCAQMD 2022), these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Regional Emissions Thresholds

Table F lists the CEQA significance thresholds for construction and operational emissions established for the Basin.

Table F: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Thresholds (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction	75	100	550	150	150	55
Operations	55	55	550	150	150	55

Source: South Coast AQMD Air Quality Significance Thresholds (SCAQMD 2019)

AQMD = Air Quality Management District
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emissions thresholds would be considered significant under SCAQMD guidelines. These thresholds, which SCAQMD developed and which apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project site are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 ppm
- California State 8-hour CO standard of 9 ppm

Localized Impacts Analysis

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 and updated it in July 2008 (SCAQMD 2008), recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of the NAAQS or the CAAQS for CO, NO_2, PM_{10}, and $PM_{2.5}$, as shown in Table A. LSTs are based on the ambient concentrations of that pollutant within the project's Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. The project site is in the Banning Airport SRA. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. As described above, the nearest sensitive receptors in proximity to the project site are single-family homes to the west of Hathaway Street as close as approximately 75 feet (23 meters) from the project site boundary and approximately 40 feet (12 meters) from the Hathaway Street roadway construction limits. SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances. SCAQMD guidance for LST analyses is to use the 25-meter values for all situations where sensitive receptors are within 25 meters distance. Thus, the 25-meter values were used.

The LST screening tables provide for 1-, 2-, and 5-acre construction sites. The proposed project site is 94.86 acres; however, the construction activities would only take place on portions of the project site on any 1 day. The SCAQMD recommends assuming that 4 acres would be disturbed in any 1 day; therefore, LSTs for the 4 acre/25-meter combination were derived by interpolation. Table G shows the emissions thresholds that would apply based on the project size and distance to nearby receptors during project construction and operation, respectively.

Greenhouse Gas Emissions

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Table G: SCAQMD Localized Significance Thresholds

Emissions Source Category	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction (4 acre, 25-meter distance)	207	2,392	17	9
Operations (4 acre, 25-meter distance)	207	2,392	5	3

Source: *Final Localized Significance Threshold Methodology* (SCAQMD 2008).
Note: The local Source Receptor Area is Banning Airport
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District

Appendix G of the *State CEQA Guidelines* includes significance thresholds for GHG emissions. A project would normally have a significant effect on the environment if it would do either of the following:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Currently, there is no statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. Threshold methodology and thresholds are still being developed and revised by air districts in California.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group) in 2008. This Working Group proposed a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. The applicable tier for this project is Tier 3, which states that if GHG emissions are less than 3,000 MT CO_2e per year, project-level and cumulative GHG emissions would be less than significant.

Energy

While no quantitative thresholds related to energy are included in the *State CEQA Guidelines*, the *State CEQA Guidelines* indicate that a project would normally have a significant adverse energy impact if the project would do either of the following:

- Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

For the purposes of this analysis, impacts to energy resources will be considered significant if the project would result in the wasteful, inefficient, or unnecessary consumption of fuel or energy;

and/or conversely, if the project would not incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation, or other project features.

IMPACTS AND MITIGATION MEASURES

Emissions would include criteria air pollutants and GHG emissions. The sections below describe the proposed project's consistency with applicable air quality plans, estimated project emissions, and the significance of impacts with respect to SCAQMD and local thresholds.

Air Quality Impacts

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from project-related vehicular trips and due to energy consumption (e.g., electricity and natural gas usage) by the proposed land uses.

Consistency with Applicable Air Quality Plans

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The current regional air quality plan is the *Final 2022 Air Quality Management Plan* (AQMP) adopted by the South Coast Air Quality Management District (SCAQMD) on December 2, 2022.[1] The AQMP incorporates current scientific, technological, and planning assumptions and updated air pollution emission inventory methodologies for various air pollution source categories. The AQMP addresses new and changing federal requirements, implements new technology measures to reduce air pollution, and continues the SCAQMD legacy of developing economically sound and flexible regulatory compliance approaches for the Basin.

The Basin is currently a federal and State nonattainment area for PM_{10}, $PM_{2.5}$, and ozone. The AQMP proposes attainment demonstration of the federal $PM_{2.5}$ standards through a more focused control of sulfur oxides (SO_X), directly-emitted $PM_{2.5}$, nitrogen oxides (NO_X), and volatile organic compounds (VOCs).

Pursuant to the methodology provided in Chapter 12 of the *CEQA Air Quality Handbook* (SCAQMD 1993), consistency with the AQMP is affirmed when a project (1) is consistent with the AQMP's growth assumptions established pursuant to projections of local planning agencies to determine control strategies for regional compliance status, and (2) would not increase the frequency or severity of an air quality standards violation or cause a new violation.

[1] South Coast Air Quality Management District. 2022. *Final 2022 Air Quality Management Plan*. December.

The proposed project would include a 1,420,722 sf warehouse distribution building. As this is more than 500,000 sf of floor space, the proposed project would be considered a project of statewide, regional, and/or area-wide significance as defined in the California Code of Regulations (Title 14, Division 6, Chapter 3, Article 13, Section 15206(b)). Because the proposed project would be defined as a regionally significant project under CEQA, it requires analysis based on the Southern California Association of Governments' (SCAG) Intergovernmental Review criteria.

The project site has a General Plan land use and zoning designation of Business Park (BP). According to the General Plan Land Use Element and Chapter 17.12 (Commercial and Industrial Districts) of the Banning Municipal Code, "light industrial manufacturing and office/warehouse buildings are appropriate in this designation. Restaurants and retail uses ancillary to a primary use, and professional offices are also appropriate. Commercial development, such as large-scale retail (club stores, home improvement, etc.) and mixed-use projects may also be permitted, subject to a conditional use permit." The proposed project does not require a General Plan Amendment or a Zone Change, as the proposed warehouse development is a permitted use in the existing Business Park (BP) land use and zoning designation. Table H provides a consistency analysis of the applicable goals and policies within the City of Banning General Plan and the project.

As the project is consistent with the City of Banning General Plan, it meets SCAG Intergovernmental Review criteria. The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD AQMP. However, as shown below, the project's peak daily emissions of NO_X, even with implementation of Mitigation Measure AQ-1, would exceed the SCAQMD threshold of significance for maximum daily emissions of this criteria pollutant. Therefore, the proposed project could result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation. Thus, although the project is consistent with the City of Banning General Plan, which is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD AQMP, the proposed project would not be consistent with the AQMP due to the high level of unmitigable NO_X emissions that would be emitted during project operation. This would be a significant air quality impact.

Criteria Pollutant Analysis

The Basin is designated as nonattainment for O_3 and $PM_{2.5}$ for federal standards and nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards. The SCAQMD's 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, SCAQMD 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.

Table H: Development Project Consistency Analysis with the City of Banning General Plan

Applicable Policies	Development Project Consistency Analysis
Land Use Element-Commercial and Industrial Goals and Policies	
Industrial Goal: A balanced mix of non-polluting industrial land uses which provide local jobs for the City's residents.	
Policy 5: The City shall coordinate with the Banning Unified, the Beaumont Unified School Districts and the Mount San Jacinto Community College to provide vocational education to support commercial and industrial businesses in the City and surrounding areas.	**Consistent**: The business park development proposed for the project would provide construction and long-term industrial and warehouse job opportunities for current and future students within the public school and college districts in the City of Banning and vicinity.
Policy 7: The land use map shall include sufficient industrial lands for manufacturing, warehousing and distribution, while carefully considering compatibility with adjacent lands.	**Consistent**: As noted above, the project would provide the City with additional business park zoning (including light industrial uses), in which uses would provide jobs for residents. Design standards and guidelines imposed by the City would ensure that uses in the proposed industrial zoning would be compatible with adjacent lands.
Policy 8: Industrial lands shall be located on major roadways with good access to Interstate 10, to assure that potential traffic impacts associated with tractor-trailers are minimized.	**Consistent**: The project site lies along a main arterial road in North Hathaway, with direct access to Interstate 10 along Hargrave Street and East Ramsey Street. These locations would accommodate tractor-trailer traffic while minimizing impacts to adjacent land uses.
Policy 10: The Zoning Ordinance shall include principles, design standards and guidelines, which encourage the development of high-quality industrial projects.	**Consistent**: Based on the Design Review, Tentative Parcel Map, and other discretionary and ministerial approvals, permits, and actions by the City in support of these (e.g., grading permit, off-site street and utility permits, building permit, etc.) requirements, the project would be consistent with current design standards and guidelines.
Land Use Element-Public Facilities Goals and Policies	
Goal: Sufficient and appropriately located public facilities to serve the needs of the City's residents, businesses, and visitors.	
Policy 1: The City shall take a leadership role with all providers of public services in the community to assure they provide adequate and quality levels of service based on future demands.	**Consistent**: The project will ensure public services are adequately provided at the project site through consistency with the General Plan.
Land Use Element-Open Space Goals and Policies	
Goal: The conservation and management of open space areas to provide recreational opportunities and protect important resources in perpetuity.	
Policy 1: Lands preserved through conservation easements, acquired by private or public agencies, or dedicated for open space shall be designated for the appropriate Open Space land use category on the land use map as they are preserved.	**Consistent**: The project site is consistent with the applicable Multiple Species Habitat Conservation Plan (MSHCP) and is not within a Criteria Cell, Cell Group, or Core. The project is located within the San Gorgonio Special Linkage area. For special linkage areas, the MSHCP requires local jurisdictions to assure preservation of a wildlife movement corridor in compliance with guidelines set forth in the *State CEQA Guidelines* for wildlife movement and migratory wildlife corridors. The project would not interfere substantially with movement of any wildlife species or impede a wildlife corridor.
Policy 3: The City of Banning shall protect the peaks and ridgelines within the City and encourage coordination with adjacent jurisdictions to protect the peaks and ridgelines within the City's area of influence, to protect the historic	**Consistent**: The project site does not contain any peaks or ridgelines within the City or in the vicinity. The naturally occurring drainage areas that traverse the project site would be retained under current design.

Table H: Development Project Consistency Analysis with the City of Banning General Plan

Applicable Policies	Development Project Consistency Analysis
visual quality of the hillside areas and natural features of the Pass area.	
Air Quality Element	
Goal: To preserve and enhance local and regional air quality for the protection of the health and welfare of the community.	
Policy 1: The City shall be proactive in regulating local pollutant emitters and shall cooperate with the Southern California Association of Governments and the South Coast Air Quality Management District to assure compliance with air quality standards.	**Consistent**: The project would comply with all applicable air quality regulations during construction and operation and would mitigate impacts to the extent feasible.
Policy 2: The City shall continue to coordinate and cooperate with local, regional, and federal efforts to monitor, manage and reduce the levels of major pollutants affecting the City and region, with particular emphasis on PM10 and ozone emissions, as well as other emissions associated with diesel-fueled equipment and motor vehicles.	**Consistent**: The project would comply with all applicable air quality regulations during construction and operation and would mitigate impacts to the extent feasible.
Policy 3: City land use planning efforts shall assure that sensitive receptors are separated from polluting point sources.	**Consistent**: The project would comply with all applicable air quality regulations during construction and operation and would mitigate impacts to the extent feasible.
Policy 4: Development proposals brought before the City shall be reviewed for their potential to adversely impact local and regional air quality and shall be required to mitigate any significant impacts.	**Consistent**: The project would comply with all applicable air quality regulations during construction and operation and would mitigate impacts to the extent feasible.
Policy 5: The City shall promote the use of clean and/or renewable alternative energy sources for transportation, heating, and cooling	**Consistent**: The project would comply with all applicable air quality regulations during construction and operation and would utilize energy efficient equipment for heating and cooling and facilitate use of alternative energy equipment and vehicles to the extent feasible
Policy 6: The City shall support the development of facilities and projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle paths and lanes, and community-wide multi-use trails.	**Consistent**: The project is designed to be connected by an internal system of pedestrian walkways and paths and is consistent with the General Plan Street System and would not significantly affect circulation within or adjacent to the project site.
Energy and Mineral Resources Element	
Goal: Efficient, sustainable and environmentally appropriate use and management of energy and mineral resources, assuring their long-term availability and affordability.	
Policy 1: Promote energy conservation throughout all areas of the community and sectors of the local economy, including the planning and construction of urban uses and in City and regional transportation systems.	**Consistent**: The project design would comply with all applicable energy conservation and alternative energy regulations prior to approval for construction and through operation.
Policy 2: Promote the integration of alternative energy systems, including but not limited to solar thermal, photovoltaics and other clean energy systems, directly into building design and construction.	**Consistent**: The project design would comply with all applicable energy conservation and alternative energy regulations prior to approval for construction and through operation.

Table H: Development Project Consistency Analysis with the City of Banning General Plan

Applicable Policies	Development Project Consistency Analysis
Public Buildings and Facilities Element	
Goal: The provision of a full range of dependable, cost-effective, and conveniently located public buildings, services and facilities that meet the functional, social and economic needs of the entire community.	
Policy 2: Continue to identify and evaluate viable, long-term funding mechanisms that provide for the construction, maintenance and operation of existing and future public buildings and facilities, including assuring that new development funds its fair share of these facilities.	**Consistent**: The project is consistent with the General Plan's goal of encouraging industrial development and providing employment opportunities within the City. Through coordination with the City, the new development would fund its share of public buildings and facilities.
Policy 5: Encourage the undergrounding of all utility lines and the undergrounding or screening of transformers/facilities.	**Consistent**: The project would comply with all requirements related to undergrounding utility lines and undergrounding or screening of transformers/facilities.

Source: City of Banning Community Development Department, City of Banning General Plan, January 31, 2006.; County of Riverside Planning Department, County of Riverside General Plan, Land Use Element, June 29, 2021.

Construction Emissions. Construction activities produce combustion emissions from various sources (utility engines, tenant improvements, and motor vehicles transporting the construction crew). Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change.

The construction analysis includes estimating the construction equipment that would be used during each construction activity, the hours of use for that construction equipment, the quantities of earth and debris to be moved, and the on-road vehicle trips (e.g., worker, soil-hauling, and vendor trips). Earthwork on-site during construction would be balanced. CalEEMod defaults are assumed for the construction activities, off-road equipment, and on-road construction fleet mix and trip lengths. The latest plans expect that construction of the project would begin toward the end of 2024 and be completed in approximately 18 months. The construction analysis below was conducted assuming that construction would begin in January 2024 and last approximately 18 months. This schedule is relevant for determining peak daily emissions as described in the analysis section of this report. Table I lists the tentative project construction schedule.

Table I: Tentative Project Construction Schedule

Phase Name	Phase Start Date	Phase End Date	Number of Days
Onsite Construction			
Demolition	1/2/2024	1/29/2024	2
Site Preparation	1/30/2024	2/8/2024	8
Grading	2/9/2024	3/22/2024	31
Building Construction	3/23/2024	5/6/2025	292
Architectural Coating	11/1/2024	5/10/2025	136
Onsite Paving	5/7/2025	7/9/2025	46
Roadway Construction			
Grubbing & Land Clearing	1/1/2025	1/28/2025	20
Grading & Excavation	1/29/2025	2/25/2025	20
Drainage, Utilities, & Sub-Grade	2/26/2025	5/20/2025	60
Road Paving	5/21/2025	7/8/2025	35

Source: Estimated by LSA Associates, Inc. from the project information provided (September 2023).

The most recent version of CalEEMod (Version 2022.1) was used to develop the construction equipment inventory and calculate the construction emissions. Table J lists the estimated construction equipment that would be used during project construction as estimated by CalEEMod default values. The CalEEMod output is included as Attachment C.

Table J: Diesel Construction Equipment Used by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Demolition	Excavators	3	8	36	0.38
	Rubber Tired Dozers	2	8	367	0.40
	Concrete/Industrial Saws	1	8	33	0.73
Site Preparation	Rubber Tired Dozers	3	8	367	0.40
	Tractors/Loaders/Backhoes	4	8	84	0.37
Grading	Graders	1	8	148	0.41
	Scrapers	2	8	423	0.48
	Excavators	2	8	36	0.38
	Tractors/Loaders/Backhoes	2	8	84	0.37
	Rubber Tired Dozers	1	8	367	0.40
Building Construction	Forklifts	3	8	82	0.20
	Generator Sets	1	8	14	0.74
	Cranes	1	7	367	0.29
	Welders	1	8	46	0.45
	Tractors/Loaders/Backhoes	3	7	84	0.37
Onsite Paving	Pavers	2	8	81	0.42
	Paving Equipment	2	8	89	0.36
	Rollers	2	8	36	0.38
Architectural Coating	Air Compressors	1	6	37	0.48
Grubbing & Land Clearing	Crawler Tractors	1	8	87	0.43
	Excavators	1	8	36	0.38
	Signal Boards	2	8	6	0.82
Grading & Excavation	Crawler Tractors	1	8	87	0.43
	Excavators	3	8	36	0.38
	Graders	1	8	148	0.41
	Rollers	2	8	36	0.38
	Rubber Tired Loaders	1	8	150	0.36
	Scrapers	2	8	423	0.48
	Signal Boards	2	8	6	0.82
	Tractors/Loaders/Backhoes	2	8	84	0.37
Drainage, Utilities, & Sub-Grade	Air Compressors	1	8	37	0.48
	Generator Sets	1	8	14	0.74
	Graders	1	8	148	0.41
	Plate Compactors	1	8	8	0.43
	Pumps	1	8	11	0.74
	Rough Terrain Forklifts	1	8	96	0.40
	Scrapers	2	8	423	0.48
	Signal Boards	2	8	6	0.82
	Tractors/Loaders/Backhoes	2	8	84	0.37
Road Paving	Pavers	1	8	81	0.42
	Paving Equipment	1	8	89	0.36
	Rollers	3	8	36	0.38
	Signal Boards	2	8	6	0.82
	Tractors/Loaders/Backhoes	2	8	84	0.37

Source: Compiled by LSA using CalEEMod defaults (September 2023).
CalEEMod = California Emissions Estimator Model

The emissions rates shown in Table K are from the CalEEMod output tables and are the combination of the on- and off-site emissions and the greater of summer and winter emissions. As construction equipment emissions that would occur using the latest planned construction schedule would either be the same or lower (due to newer, less polluting equipment) than was analyzed in this report, the emissions shown below are a conservative representation of the expected project construction emissions. No exceedances of any criteria pollutants are expected. Standard measures are documented in the CalEEMod output in Attachment C.

Table K: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)							
	VOCs	NO_X	CO	SO_X	PM_{10}		$PM_{2.5}$	
					Exhaust	Fugitive	Exhaust	Fugitive
Onsite Construction								
Demolition	3	43	27	<1	1	20	1	3
Site Preparation	4	36	34	<1	2	9	1	3
Grading	4	35	32	<1	1	6	1	1
Building Construction	4	23	66	<1	1	14	<1	3
Architectural Coating	50	2	9	<1	<1	5	<1	1
Onsite Paving	2	8	11	<1	<1	4	<1	<1
Roadway Construction								
Grubbing & Land Clearing	<1	4	4	<1	<1	4	<1	<1
Grading & Excavation	3	28	32	<1	1	4	1	1
Drainage, Utilities, & Sub-Grade	3	23	25	<1	<1	5	1	1
Road Paving	1	8	13	<1	<1	4	<1	<1
Peak Daily	**57**	**51**	**98**	**<1**	**2**	**24**	**2**	**4**
SCAQMD Threshold	**75**	**100**	**550**	**150**	**150**		**55**	
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: Compiled by LSA (September 2023).
Note: It was assumed that the architectural coatings were applied during the building construction and paving phases. The peak daily emissions also combine emissions from the onsite construction with the roadway construction, per the schedule.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table K, construction emissions associated with the project would not exceed the SCAQMD's thresholds. Therefore, construction of the proposed project would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

Odors from Construction Activities. Heavy-duty equipment in the project area during construction would emit odors, primarily from the equipment exhaust. However, the construction-produced odors would cease to occur after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project, and no mitigation measures are required.

SCAQMD Rule 402 regarding nuisances states:

> A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

The proposed uses are not anticipated to emit any objectionable odors. Therefore, the project would not result in other emissions adversely affecting a substantial number of people.

Construction Emissions Conclusions. Table K shows that daily regional construction emissions would not exceed the daily thresholds of any criteria pollutant emissions thresholds established by SCAQMD; thus, during construction, there would be no significant air quality impacts.

Operational Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle 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.

The proposed project would generate emissions from daily operations that would include heavy-duty truck trips from warehouse operations. It was assumed there would be 8 warehouse material handling equipment (e.g., forklifts, material handlers), all electrically powered. The *First Hathaway Logistics Center Local Transportation Analysis* (Stantec, October 2022) determined that the warehouse would generate a total of 1,989 vehicle trips daily, with the project trucks comprising 313 of these trips.

As the distances the warehouse haul trucks will travel is unknown, it was conservatively assumed the average trip length would be 40 miles, with the other project vehicles matching CalEEMod default trip lengths. 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 particulate matter (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 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, such as 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, assuming compliance with all applicable rules (e.g., SCAQMD Rule 2305, CALGreen), were calculated using CalEEMod and are shown in Table L. The peak daily emissions associated with project operations are identified in Table K for VOCs, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$.

Table L: Project Operation Emissions (lbs/day)

Source Category	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Source Emissions	44	1	62	0	<1	<1
Energy Source Emissions	<1	7	6	<1	1	1
Mobile Source Emissions	11	56	195	<1	54	14
Warehouse Equipment Emissions	0	0	0	0	0	0
Total Project Emissions	**55**	**63**	**263**	**<1**	**55**	**15**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (September 2023).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

The results shown in Table L indicate the project would not exceed the significance criteria for daily VOCs, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions; however, the daily emissions of NO_x would exceed the significance criteria for NO_x and mitigation would be required. CalEEMod results listing the details of the emissions results are attached (Attachment C).

Implementation of Mitigation Measure AQ-1 would be required to reduce NO_x pollutant emissions from the proposed project to the extent feasible. The following multi-part mitigation measure shall be implemented by the project:

Mitigation Measure AQ-1: The project applicant shall ensure that the following multi-part mitigation measure is implemented during project operation.

- All appliances within the project shall be energy star rated appliances.
- All water fixtures shall be water efficient (toilets/urinals (1.5 GPM or less), showerheads (2.0 GPM or less), and faucets (1.28 GMM or less)).
- All landscape equipment used to maintain the landscaping within the project shall be electric.

- All facility-owned and operated fleet equipment with a gross vehicle weight rating greater than 14,000 pounds accessing the site shall meet or exceed 2010 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Facility operators shall maintain records on-site demonstrating compliance with this requirement and shall make records available for inspection by the City of Banning, the South Coast Air Quality Management District (SCAQMD), and the State upon request.

- Tenant lease agreements for the project shall include contractual language restricting trucks and support equipment from nonessential idling longer than 5 minutes while on site. The idling restriction will be presented on signs at the entrance to the project as well as at loading docks and truck parking areas.

- All facility operators shall train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.

- Interior- and exterior-facing signs, including signs directed at all dock and delivery areas, shall be provided identifying idling restrictions and contact information to report violations to the California Air Resources Board (CARB), the air district, and the building manager.

- The buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed to supply power for installation of electric charging systems for electric trucks and power transport refrigeration units (TRUs). Conduit shall be installed from the electrical room to all tractor trailer parking spaces in logical locations on site to facilitate future electric truck charging.

- Prior to issuance of occupancy permits for the project, the operator shall be required to establish and promote a rideshare program prepare and submit a Transportation Demand Management Program detailing strategies that discourages single-occupancy vehicle trips by employees by increasing and provides financial incentives for alternate modes of transportation, including carpooling/vanpools, public transit, and biking.

- Signs at every truck exit driveway shall be provided showing directional information to the truck route.
- The tenant shall be required to train staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Facility operators shall also be required to maintain records on-site demonstrating compliance and make records available for inspection by the City of Banning, the SCAQMD, and the State upon request.
- The tenant shall be required to enroll in the United States Environmental Protection Agency's SmartWay program and shall be required to use carriers that are SmartWay carriers.
- The tenant shall be provided with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

While many of these measures would provide emissions reductions that are not quantifiable, implementation of Mitigation Measure AQ-1 would be required to reduce criteria pollutant emissions from the proposed project to the extent feasible. Mitigated emissions are shown in Table M.

Table M: Project Operation Emissions (lbs/day) with Mitigation

Source Type	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source Emissions	34	<1	<1	<1	<1	<1
Energy Source Emissions	<1	7	6	<1	<1	<1
Mobile Source Emissions	10	54	187	<1	52	14
Warehouse Equipment Emissions	0	0	0	0	0	0
Total Project Emissions	**44**	**61**	**193**	**<1**	**52**	**14**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**

Source: LSA (September 2023).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table M, with implementation of Mitigation Measure AQ-1, emissions associated with the project would remain above the SCAQMD significance thresholds. Therefore, the proposed project would result in significant and unavoidable operational air quality impacts.

Long-Term Microscale (CO Hot Spot) Analysis

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels (EPA 1992).

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at Palm Springs station, the closest station to the project site, showed a highest recorded 1-hour concentration of 1.3 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 0.7 ppm (the State standard is 9 ppm) during the past 3 years (Table D). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

As described in the *First Hathaway Logistics Center Local Transportation Analysis* (Stantec 2022), the proposed project would generate 114 AM peak hour trips and 142 PM peak-hour trips. As the proposed project would not generate 150 or more AM or PM peak hour trips, the proposed project would not meet the criteria for an evaluation of study area intersection or roadway segment level of service (LOS). Therefore, it is concluded that the addition of the proposed project traffic would not create any significant adverse impacts to nearby intersections.

Therefore, given the extremely low level of CO concentrations in the project area, and lack of traffic impacts at any intersections, project-related vehicles are not expected to contribute significantly to result in the CO concentrations exceeding the State or federal CO standards.

Health Risk on Nearby Sensitive Receptors

Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units. The site is bounded by Hathaway Street to the west, undeveloped land to the north, east, and south, and a Caltrans facility along a portion of the site boundary to the south, as shown in Figure 2. By design, the localized impacts analysis only includes on-site sources; however, the CalEEMod outputs do not separate on-site and off-site emissions for operations. For a worst-case scenario assessment, the emissions detailed in Table O assume all area and energy source emissions would occur on site, and 5 percent of the project-related new mobile sources, which is an estimate of the amount of project-related on-site vehicle and truck travel, would occur on site. Considering the total trip length included in CalEEMod, the 5 percent assumption is conservative. The results of the LST analysis, summarized in

Tables N and O indicate that the project would not result in an exceedance of SCAQMD LSTs during project construction or operation.

Table N: Construction Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions	36	33	17	5
LST	**207**	**2,392**	**17**	**9**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (September 2023).
Note: The SRA is Banning Airport, 4 acres, receptors at 75 feet.
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Table O: Long-Term Operational Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions	11	78	4	2
LST	**207**	**2,392**	**5**	**3**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (September 2023).
Note: The SRA is Banning Airport, 4 acres, receptors at 75 feet. It was assumed that 5% of vehicle VMT would occur on site.
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area
VMT = vehicle miles traveled

Objectionable Odors

Heavy-duty equipment on the project site during construction would emit odors, primarily from equipment exhaust. However, the construction activity would cease after individual construction is completed.

SCAQMD Rule 402 regarding nuisances states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." The proposed uses are not anticipated to emit any objectionable odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and no mitigation measures are required.

Greenhouse Gas Emission Impacts

The following sections describe the proposed project's construction- and operation-related GHG impacts and consistency with applicable GHG reduction plans.

Generation of Greenhouse Gas Emissions

This section discusses the project's impacts related to the release of GHG emissions for the construction and operational phases of the project.

Estimation of GHG emissions in the future does not account for all changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that is worse than that which is likely to be encountered (after energy-efficient technologies have been implemented). While information is presented below to assist the public and decision-makers in understanding the project's potential contribution to climate change impacts, the information available is not sufficiently detailed to allow a direct comparison between particular project characteristics and particular climate change impacts or between any particular proposed mitigation measure and any reduction in climate change impacts.

Construction and operation of the proposed project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the project's operation.

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions.

Construction Greenhouse Gas 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_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. Neither the City or SCAQMD provides a separate GHG significance threshold for construction emissions, rather SCAQMD provides guidance specifying that construction emissions should be amortized over 30 years (considered a typical project lifetime), added to the project operational emissions, and that total compared to the GHG significance threshold. As shown in Table P, the amortized construction emissions would be approximately 104 MT CO_2e per year. (See the CalEEMod output in Attachment C for details.)

Operational GHG Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), 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 car and truck trips to and from the project site. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. 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.

GHG emissions were estimated using CalEEMod. Table Q shows the calculated GHG emissions for the proposed project.

Table P: Construction Greenhouse Gas Emissions

Construction Phase	Total Emissions per Phase (MT)			Total Emissions per Phase (MT CO_2e)
	CO_2	CH_4	N_2O	
Onsite Construction				
Demolition	173	<1	<1	180
Site Preparation	21	<1	<1	21
Grading	99	<1	<1	100
Building Construction	2,335	<1	<1	2,396
Architectural Coating	118	<1	<1	120
Paving	40	<1	<1	40
Roadway Construction				
Grubbing & Land Clearing	7	<1	<1	7
Grading & Excavation	64	<1	<1	65
Drainage, Utilities, & Sub-Grade	171	<1	<1	172
Road Paving	33	<1	<1	34
Total Emissions for the Entire Construction Process				**3,134.0**
Total Construction Emissions Amortized over 30 Years				**104**

Source: Compiled by LSA (September 2023).
CH_4 = methane
CO_2 = carbon dioxide
MT = metric tons
MT CO_2e = metric tons of carbon dioxide equivalent
N_2O = nitrous oxide

Table Q: Long-Term Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT per year)					
	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Construction Emissions Amortized over 30 Years						104
Operational Emissions						
Area	0	29	29	<1	<1	29
Energy	0	3,114	3,114	<1	<1	3,125
Mobile	0	12,988	12,988	<1	1	13,374
Offroad	0	0	0	0	0	0
Waste	119	0	119	12	<1	417
Water	104	475	580	11	<1	925
Total Project Emissions	**223**	**16,606**	**16,829**	**23**	**1**	**17,974**
SCAQMD Tier 3 Threshold						**3,000**
Emissions Exceed Threshold?						**Yes**

Source: Compiled by LSA (September 2023).
Bio-CO_2 = biologically generated carbon dioxide
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT = metric tons
N_2O = nitrous oxide
NBio-CO_2 = non-biologically generated carbon dioxide
SCAQMD = South Coast Air Quality Management District

As shown in Table Q, the project would generate 17,974 metric tons of CO_2e per year. Project-related GHG emissions would exceed the SCAQMD's 3,000 MT CO_2e per year threshold. Thus, operation of the project would result in a significant impact for GHG emissions and mitigation would be required. Implementation of Mitigation Measures GHG-1, GHG-2, and GHG-3 would be required to reduce GHG emissions from the proposed project to the extent feasible.

MM GHG-1 Provide separate recycling bins within each commercial/industrial building and provide large external recycling collection bins at central locations in the commercial and industrial land uses for collection truck pick-up. Provide a commercial recycling/composting program that provides 70 percent diversion of waste for the commercial land uses. Provide an industrial recycling program that provides 80 percent diversion of waste for the industrial land uses.

MM GHG-2 Provide drought tolerant low-water landscaping and trees throughout the project site and use recycled (purple pipe) irrigation water with drip irrigation and weather based smart irrigation controllers.

MM GHG-3 Prior to the issuance of building permits, the project applicant or successor in interest shall provide documentation to the City of Banning demonstrating that the project is designed to achieve energy efficient buildings exceeding Title 24 standards with the following design criteria:

- Building envelop Insulation of conditioned space within the building shall be R15 or greater for walls and R30 or greater for attics/roofs.
- Windows shall have an insulation factor of 0.28 or less U-factor and 0.22 or less SHGC.
- All roofing material shall be CRRC Rated 0.15 aged solar reflectance or greater and 0.75 thermal emittance.
- All heating/cooling ducting within the buildings shall be insulated with R6 or greater insulation.
- All heating and cooling equipment shall be ERR 14/78 percent AFUE, or 7.7 HSPF levels of efficiency or greater.
- All water heaters shall be high efficiency electric water heaters with a minimum 0.72 Energy Factor or greater.
- Lighting within the building shall be high efficiency LED lighting with a minimum of 40 lumens/watt for 15 watt or less fixtures, 50 lumens/watt for 15–40-watt fixtures, 60 lumens/watt for fixtures greater than 40 watts.

While many of the measures in Mitigation Measures GHG-1 through GHG-3 would provide emissions reductions that are not quantifiable, implementation of these mitigation measures would be

required to reduce GHG emissions from the proposed project to the extent feasible. Mitigation Measures AQ-1 and GHG-1 through GHG-3 include measures to reduce truck and other operational emissions to the extent feasible. Mitigated emissions are shown in Table R.

Table R: Mitigated Long Term Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT per year)					
	Bio-CO_2	**NBio-CO_2**	**Total CO_2**	**CH_4**	**N_2O**	**CO_2e**
Construction Emissions Amortized over 30 Years						104
Operational Emissions						
Area	0	<1	<1	<1	0	<1
Energy	0	3,004	3,004	<1	<1	3,015
Mobile	0	12,468	12,468	<1	1	12,839
Offroad	0	0	0	0	0	0
Waste	119	0	119	12	<1	417
Water	104	475	580	11	<1	925
Total Project Emissions	**223**	**15,948**	**16,171**	**23**	**1**	**17,300**
					SCAQMD Tier 3 Threshold	**3,000**
					Exceeds?	**Yes**

Source: Compiled by LSA (September 2023).
Bio-CO_2 = biologically generated carbon dioxide
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT = metric tons
N_2O = nitrous oxide
NBio-CO_2 = non-biologically generated carbon dioxide
SCAQMD = South Coast Air Quality Management District

The majority of the GHG emissions (approximately 74 percent of both unmitigated and mitigated emissions) are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and federal standards, and the project has no control over these standards.

Consistency with Greenhouse Gas Reduction Plans

The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan, EO B-30-15, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan (CARB 2017), to reflect the 2030 target set by EO B-30-15 and codified by SB 32. 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. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 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.

In addition, the 2022 Scoping Plan 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. As discussed above, the proposed project would comply with the CALGreen Code, 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 project would comply with the CALGreen Code, which includes a variety of different measures, including reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. 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. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. 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 (CARB 2012). Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

Energy

The proposed project would increase the demand for electricity, natural gas, and gasoline when compared to the existing condition of the site. The discussion and analysis provided below is based on the data included in the CalEEMod output, which is included as Attachment C.

Construction-Period Energy Use

The anticipated construction schedule assumes that the proposed project would be built over approximately 18 months. The proposed project would require site preparation, grading, building construction, paving, and architectural coating during construction.

Construction of the proposed project would require energy for the manufacture and transportation of building materials and for preparation of the site for grading activities and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. Table S shows the diesel fuel usage based on the CalEEMod modeling assumptions described above.

Table S: Proposed Project Energy Consumption Estimates During Construction

Energy Type	Total Energy Consumption	Annual Percentage Increase Countywide
Gasoline Fuel (total gallons)	1,016	<0.01
Diesel Fuel (total gallons)	74,652	0.02

Source: Compiled by LSA (September 2023).

In 2019, vehicles in California consumed approximately 3.8 billion gallons of diesel fuel (CEC n.d.-c). Therefore, diesel demand generated by construction of the proposed project would be a minimal fraction of diesel fuel consumption in California and, by extension, in Riverside County.

In addition, the CalEEMod output for energy consumption incorporates project compliance with Title 13-Section 2449 of the CCR, and California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program regulations, which include implementation of standard control measures and Best Available Control Measures for equipment emissions and materials recycling.

Best Available Control Measures include, but are not limited to, requirements that the Project Applicant utilize only low-sulfur fuel having a sulfur content of 15 parts per million by weight or less; ensure off-road vehicles (i.e., self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on road) limit vehicle idling to 5 minutes or less; register and label vehicles in accordance with the CARB Diesel Off-Road Online Reporting System; restrict the inclusion of older vehicles into fleets; and retire, replace, or repower older engines or install Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). Additionally, the construction contractor will recycle/reuse at least 65 percent of the nonhazardous construction and demolition waste and will comply with mandatory provisions of Part 6 of the Title 24 Building Energy Efficiency Standards and Part 11 referred to as California Green Building Standards Code, or CALGreen.

Construction activities are not anticipated to result in an inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed 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, construction energy impacts would be less than significant, and no mitigation would be required.

Operational Energy Use

Energy use includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage for heating, while indirect sources include electricity generated by off-site power plants. Natural gas use in CalEEMod is measured in units of a thousand British thermal units (kBTU) per year; however, this analysis converts the results to natural gas in units of therms. Electricity use in CalEEMod is measured in kilowatt hours (kWh) per year.

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24 (e.g., space heating, space cooling, water heating, and ventilation). Non-Title 24 uses include all other end uses (e.g., appliances, electronics, and other miscellaneous plug-in uses). Because some lighting is not considered as part of the building envelope energy budget, CalEEMod considers lighting as a separate electricity use category.

For natural gas, uses are likewise categorized as Title 24 or non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include appliances.

Table T shows the estimated potential increased electricity, natural gas, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis in conjunction with United States Department of Transportation (USDOT) fuel efficiency data (see Attachment D).

Table T: Estimated Annual Energy Use of the Proposed Project

Land Use	Electricity Use (kWh/yr)	Natural Gas Use (kBTU/yr)	Gasoline (gal/yr)	Diesel (gal/yr)
Industrial	7,683,419	27,124,683	842,678	746,194

Source: Compiled by LSA (September 2023).
gal/yr = gallons per year
kBTU/yr = thousand British thermal units per year
kWh/yr = kilowatt-hours per year

As shown in Table S, the estimated potential increased electricity demand associated with the proposed project is 7,683,419 kWh per year. In 2021, Riverside County consumed 16,767 GWh or 16,767,235,877 kWh (California Energy Commission n.d.-a). Therefore, electricity demand associated with the proposed project would be less than 0.05 percent of Riverside County's total electricity demand.

Also shown in Table S, the estimated potential increased natural gas demand associated with the proposed project is 27,124,683 kBTU per year or 271,247 therms (California Energy Commission n.d.-b). In 2021, Riverside County consumed 430.8 million therms (430,843,598 therms). Therefore, operation of the proposed project would negligibly increase the annual natural gas consumption in Riverside County by approximately 0.06 percent.

Furthermore, the proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. The average fuel economy for light-duty vehicles (automobiles, pickups, vans, and sport utility vehicles) in the United States has steadily increased, from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2020 (USDOT 2021). 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 (CEC n.d.-c).

Using the EPA gasoline fuel economy estimates for 2020, the California diesel fuel economy estimates for 2021, and the traffic data from the project traffic analyses, the proposed project would result in the annual consumption of 842,678 gallons of gasoline and 746,194 gallons of diesel fuel. In 2019, vehicles in California consumed approximately 15.6 billion gallons of gasoline and 3.8 billion gallons of diesel fuel (CEC n.d.-c). Therefore, gasoline and diesel demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California and, by extension, in Riverside County.

In addition, vehicles associated with trips to and from the project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. As such, the fuel efficiency of vehicles associated with project operations would increase throughout the life of the proposed project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses.

Energy Use Summary

As described above, 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 uses, and transportation. Impacts would be less than significant, and no mitigation measures would be necessary.

Consistency with State and Local Plans for Renewable Energy and Energy Efficiency

The CEC recently adopted the 2022 Integrated Energy Policy Report Update (IEPR). The 2022 IEPR provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2022 IEPR covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast (CEC 2023).

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impacts to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's 2022 IEPR (CEC 2023). In addition, the proposed project would comply with Title 24 and CALGreen Code standards.

The City's General Plan identifies goals, policies, and programs related to energy use within the City. Table U: General Plan Consistency Analysis, Energy addresses the Project's consistency with General Plan goals, policies, and programs applicable to energy.

Table U: General Plan Consistency Analysis, Energy

General Plan Goals, Policies, and Programs	General Plan Consistency Analysis
City of Banning General Plan – Energy and Mineral Resources Element	
Goal: Efficient, sustainable, and environmentally appropriate use and management of energy and mineral resources, assuring their long-term availability and affordability.	
Policy 1: Promote energy conservation throughout all areas of the community and sectors of the local economy, including the planning and construction of urban uses and in City and regional transportation systems.	Consistent: The proposed Project would facilitate efficient and sustainable energy use by, among other things, use of construction techniques and materials that will result in energy efficient buildings; promoting use of electric vehicles and efficient and alternative modes of transportation; use of water efficient appliances, irrigation, low water plants, and recycled water when available; and maximizing recycling of construction materials and establishing Project operations programs for industrial recycling with a goal of 80% diversion.
Program 1.A: The City shall strictly and consistently enforce all state mandated energy-conserving development and building codes/regulations and shall investigate and report on the appropriateness of developing more stringent local energy performance standards.	Consistent: The proposed Project would include "Green" building practices that meet the California Building Energy Standards of the California Building Code and CALGreen Building Standards in accordance with City Municipal Code Chapter 15.04 (Codes Adoption). The Project building would be inspected for compliance and would include an operation manual to help end-users maintain and effectively use the sustainable building features provided. The Project would be developed to conserve energy where feasible pursuant to CALGreen Building Standards and Sustainability Guidelines.
Program 1.D: The City shall encourage the use of, and programs for, electric vehicles, hybrids, bicycles and pedestrian facilities.	Consistent: The proposed Project would include provisions for electric vehicle charging and bicycle and pedestrian facilities, consistent with all City requirements.
Policy 2: Promote the integration of alternative energy systems, including but not limited to solar thermal, photovoltaics and other clean energy systems, directly into building design and construction.	Consistent: The proposed Project would promote integration of alternative energy systems into building design and construction by, among other things, constructing the building with insulation that will reduce energy use for Project operations; constructing the buildings' electrical room(s) of sufficient size to hold additional panels that may be needed to supply power for installation of electric charging systems for electric trucks and power transport refrigeration units; and providing thirty percent of the onsite parking with electrical

	conduit stubs for future charging equipment and 10 percent with electric vehicle chargers.
Program 2.A: The City shall make available to residents, businesses, and the building industry information on commercially available conservation technologies, solar thermal and photovoltaic energy systems, fuel cell and other alternative energy technology. Building regulations and guidelines that provide for the safe and efficient installation of these systems shall also be provided.	Consistent: The Project would include "Green" building practices that meet the California Building Energy Standards of the California Building Code and CALGreen Building Standards in accordance with City Municipal Code Chapter 15.04 (Codes Adoption). The Project building would be inspected for compliance and would include an operation manual to help end-users maintain and effectively use the sustainable building features provided. The Project would be developed in accordance with CALGreen Building Standards and Sustainability Guidelines, including regulations related to water heating.
EMR Policy 4: Support public and private efforts to develop and operate alternative systems of wind, solar and other electrical production, which take advantage of local renewable resources.	Consistent: The Project includes solar ready rooftops, energy efficient electric heating and cooling systems, and facilitates electric transportation by providing EV charging stations.

Source: City of Banning General Plan; Energy and Mineral Resources Element adopted 1991.

Thus, as shown above, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, energy impacts from the proposed project would be less than significant, and no mitigation measures would be necessary.

CONCLUSION

Based on the analysis presented above, construction emissions associated with the proposed project would not exceed established SCAQMD significance thresholds; however, operational emissions associated with the proposed project would exceed established SCAQMD significance thresholds for NO_x. With all feasible mitigation measures applied, the operational emissions of NO_x would continue to exceed the SCAQMD significance threshold. Thus, this would be a significant and unavoidable environmental impact. The proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The proposed project would also not result in objectionable odors affecting a substantial number of people. GHG emissions released during construction and operation of the project are estimated to exceed the SCAQMD significance threshold and thus would be cumulatively considerable. With all feasible mitigation measures applied the operational emissions of GHG would continue to exceed the SCAQMD significance threshold. Thus, this would be a significant and unavoidable environmental impact. However, the project would not conflict with the goals and objectives of a State or regional plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. Lastly, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources.

Attachments: A – References
B – Figures 1–3
C – CalEEMod Output
D – Energy Worksheets

ATTACHMENT A

REFERENCES

California Air Resources Board (CARB). 2012. California Air Resources Board Approves Advanced Clean Car Rules. January 27. Website: www.arb.ca.gov/news/california-air-resources-board-approves-advanced-clean-car-rules (accessed February 2023).

_____. 2017. *California's 2017 Climate Change Scoping Plan*. November.

_____. 2022a. *2022 Scoping Plan for Achieving Carbon Neutrality*. November. Website: www.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents (accessed February 2023).

———. 2022b. State and Federal Area Designations. February. Website: www.arb.ca.gov/desig/desig.htm (accessed February 2023).

———. n.d.-a. Common Air Pollutants. Website: www.arb.ca.gov/resources/common-air-pollutants (accessed February 2023).

———. n.d.-b. iADAM: Air Quality Data Statistics. Website: www.arb.ca.gov/adam/topfour/topfour1.php (accessed February 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 February 2023).

_____. 2023. Bailey, Stephanie, Jane Berner, David Erne, Noemí Gallardo, Quentin Gee, Akruti Gupta, Heidi Javanbakht, Hilary Poore, John Reid, and Kristen Widdifield. *Final 2022 Integrated Energy Policy Report.* Publication Number: CEC-100-2022-001-CMF.. February. Website: efiling.energy.ca.gov/GetDocument.aspx?tn=248735 (accessed March 2023).

———. n.d.-a. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed February 2023).

———. n.d.-b. Gas Consumption by County. Website: ecdms.energy.ca.gov/gasbycounty.aspx (accessed February 2023).

———. n.d.-c. California Gasoline Data, Facts, and Statistics. Website: www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics (accessed February 2023).

City of Banning General Plan. Website: banning.ca.us/468/General-Plan-Amendments (accessed February 2023)

City of Banning. Environment Resources Air Quality Element. Website: banning.ca.us/Document Center/View/664/GP-Ch-IV-Environmental-Resources?bidId= (accessed February 2023)

Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis, Fourth Assessment. Website: www.ipcc.ch/site/assets/uploads/2018/05/ar4_wg1_full_report-1.pdf (accessed February 2023).

_____. 2021. Climate Change 2021: The Physical Science Basis. Website: www.ipcc.ch/report/ar6/wg1/ (accessed February 2023).

South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook* (1993). April. Website: www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed February 2023).

_____. 2005. Rule 403. Fugitive Dust. Website: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf (accessed February 2023).

_____. 2008. *Final Localized Significance Threshold Methodology*. July. Website: www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf (accessed February 2023).

———. 2016a. Architectural Coatings, Rule 1113 Volatile Organic Compound (VOC) Limits as of February 5, 2016. Website: www.aqmd.gov/home/rules-compliance/compliance/vocs/architectural-coatings/tos (accessed February 2023).

_____. 2016b. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin. Website: www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf (accessed February 2023).

_____. 2019. South Coast AQMD Air Quality Significance Thresholds. April. Website: www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (accessed February 2023).

_____. 2022. *Final 2022 Air Quality Management Plan*. December. Website: www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan (accessed February 2023).

_____. n.d. Air Quality Analysis Handbook. Website: www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook (accessed February 2023).

Stantec Consulting Services Inc. 2022. *First Hathaway Logistics Center Local Transportation Analysis*. October 14.

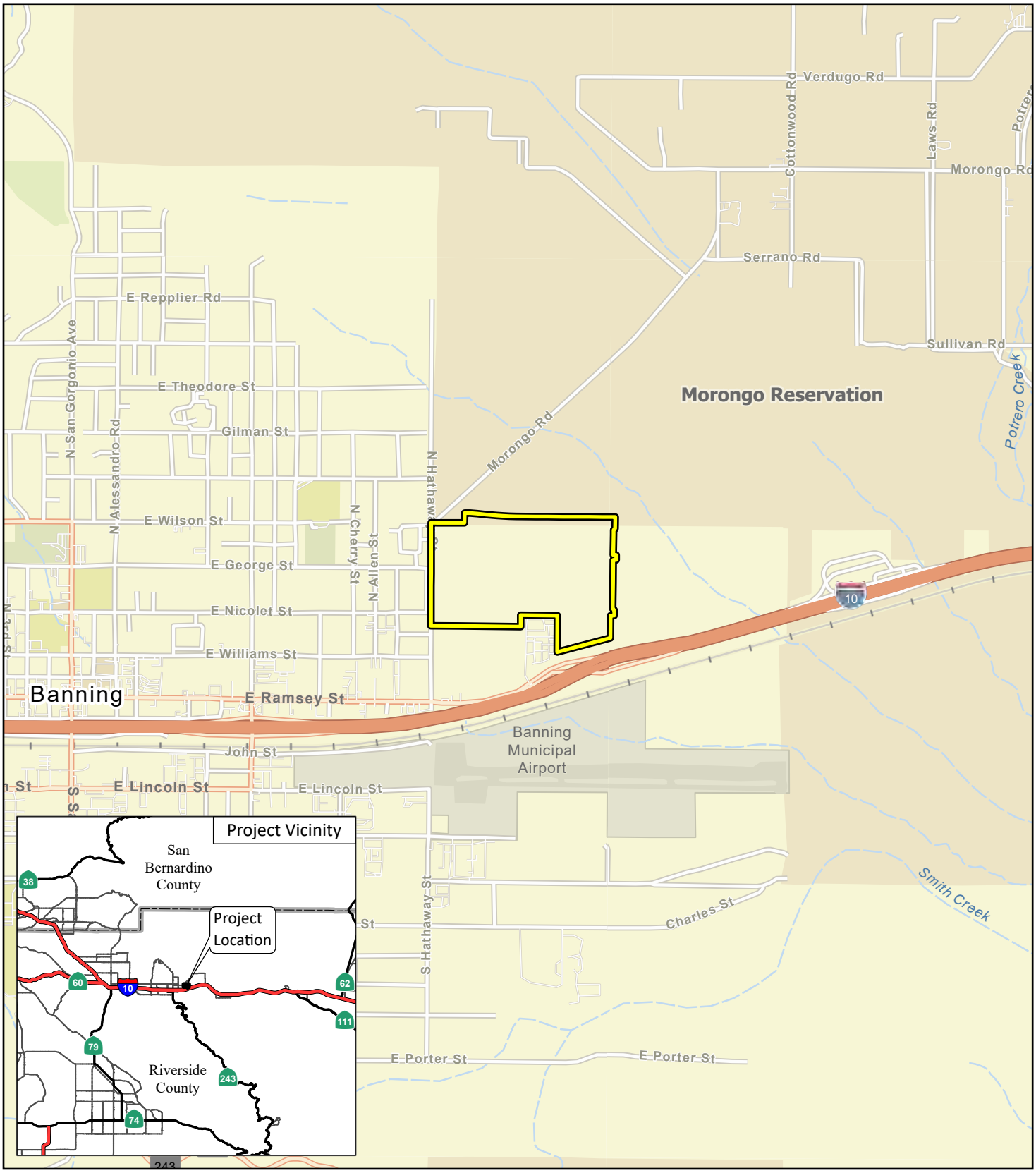
United States Department of Transportation (DOT). 2021. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Website: www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed July 2022).

United States Environmental Protection Agency (EPA). 1992. *Guideline for Modeling Carbon Monoxide from Roadway Intersections.* November. Website: www.epa.gov/sites/default/files/2020-10/documents/coguide.pdf (accessed February 2023).

_____. n.d. Air Data: Air Quality Data Collected at Outdoor Monitors across the US. Website: www.epa.gov/outdoor-air-quality-data (accessed February 2023).

ATTACHMENT B

FIGURES 1–3



LEGEND

FIGURE 1

LSA

N

0 1000 2000

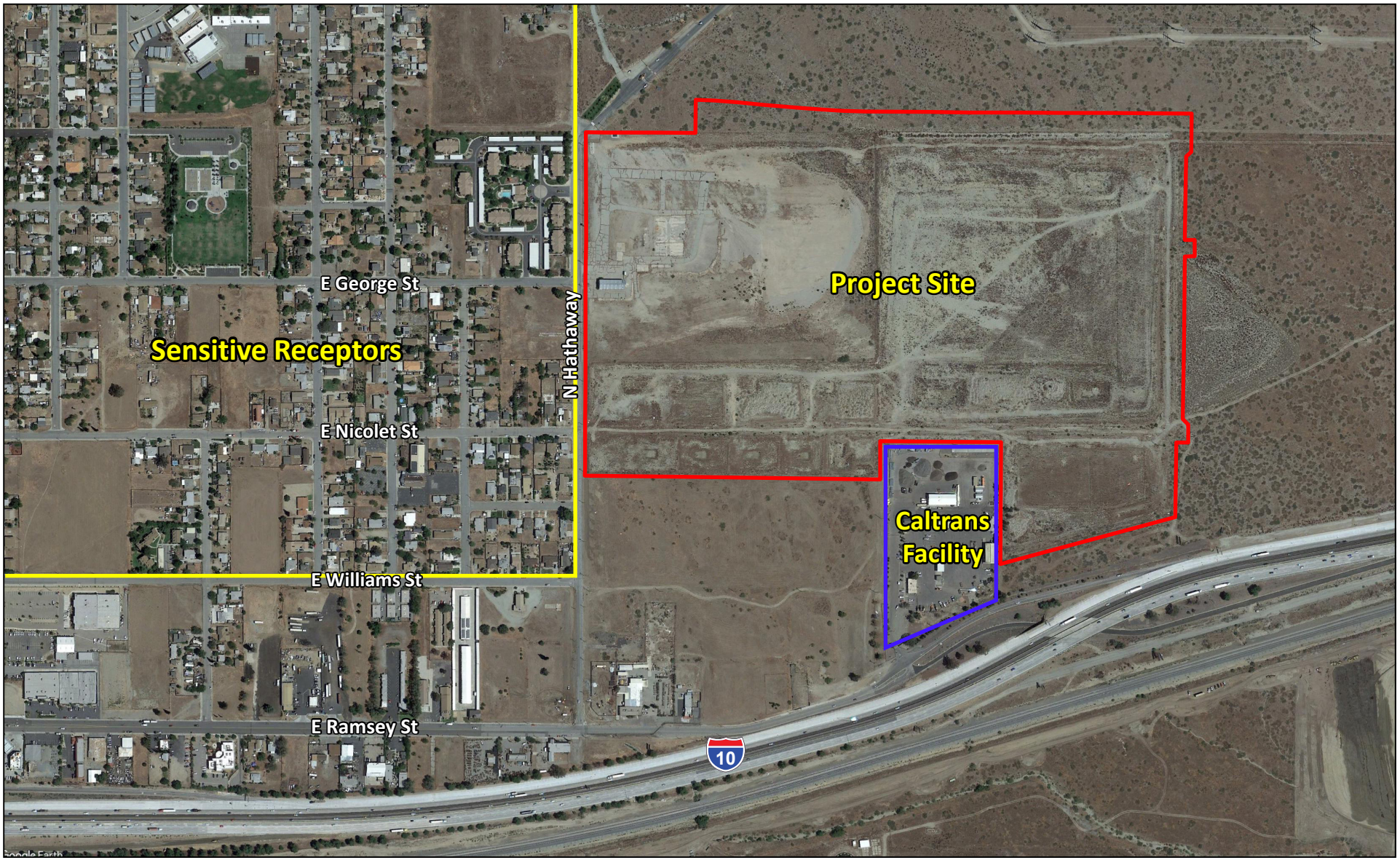
FEET

SOURCE: Esri (2023)

J:\FRT2102\GIS\Pro\First Hathaway Logistics Project.aprx (10/6/2023)

First Hathaway Logistics Project

Regional and Project Location



LSA

LEGEND

- Project Site
- Worker Sensitive Receptors
- Residential Sensitive Receptors

0 100 200
FEET

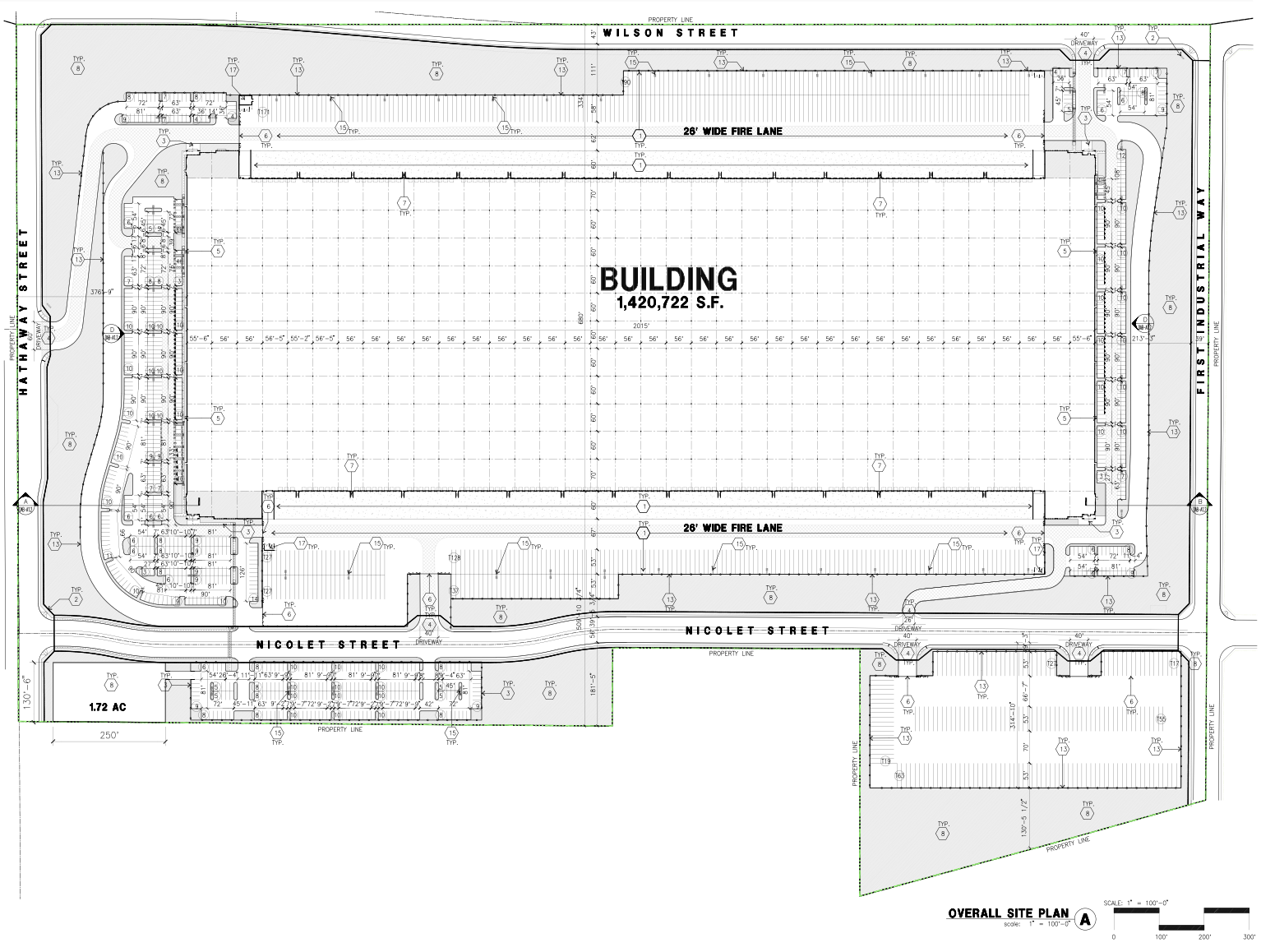
SOURCE: Google Earth 2021

FIGURE 2

First Hathaway Logistics Project

Surrounding Land Uses – Sensitive Receptors

I:\FRT2102\G\Land_Uses.ai (10/6/2023)



LSA

FIGURE 3

0 200 400
FEET

SOURCE: HPA Architecture

First Hathaway Logistics Project

Conceptual Site Plan

I:\FRT2102\G\Concept_Site_Plan.ai (11/23/2022)

ATTACHMENT C

CALEEMOD OUTPUT

First Hathaway Logistics Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

3.2. Demolition (2024) - Mitigated

3.3. Site Preparation (2024) - Unmitigated

3.4. Site Preparation (2024) - Mitigated

3.5. Grading (2024) - Unmitigated

3.6. Grading (2024) - Mitigated

3.7. Building Construction (2024) - Unmitigated

3.8. Building Construction (2024) - Mitigated

3.9. Building Construction (2025) - Unmitigated

3.10. Building Construction (2025) - Mitigated

3.11. Onsite Paving (2025) - Unmitigated

3.12. Onsite Paving (2025) - Mitigated

3.13. Architectural Coating (2024) - Unmitigated

3.14. Architectural Coating (2024) - Mitigated

3.15. Architectural Coating (2025) - Unmitigated

3.16. Architectural Coating (2025) - Mitigated

3.17. Grubbing & Land Clearing (2025) - Unmitigated

3.18. Grubbing & Land Clearing (2025) - Mitigated

3.19. Grading & Excavation (2025) - Unmitigated

3.20. Grading & Excavation (2025) - Mitigated

3.21. Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

3.22. Drainage, Utilities, & Sub-Grade (2025) - Mitigated

3.23. Road Paving (2025) - Unmitigated

3.24. Road Paving (2025) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

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	First Hathaway Logistics
Construction Start Date	1/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	19.2
Location	33.930769648434506, -116.85387376662578
County	Riverside-South Coast
City	Banning
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5626
EDFZ	11
Electric Utility	City of Banning Electric Department
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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

Unrefrigerated Warehouse-No Rail	1,421	1000sqft	32.6	1,420,722	898,912	0.00	—	—
Road Construction	1.00	Mile	11.9	0.00	0.00	—	—	—
Parking Lot	12.0	Acre	30.0	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Transportation	T-5	Implement Commute Trip Reduction Program (Voluntary)
Transportation	T-11*	Provide Employer-Sponsored Vanpool
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-50*	Required Project Contributions to Transportation Infrastructure Improvement
Transportation	T-53*	Electrify Loading Docks
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Energy	E-2	Require Energy Efficient Appliances
Energy	E-7*	Require Higher Efficacy Public Street and Area Lighting
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

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	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	56.1	45.9	98.0	0.13	1.48	23.7	25.1	1.37	4.05	5.42	—	26,280	26,280	0.94	1.58	26,836
Mit.	56.1	45.9	98.0	0.13	1.48	23.7	25.1	1.37	4.05	5.42	—	26,280	26,280	0.94	1.58	26,836
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	56.5	50.9	90.1	0.14	1.78	23.7	25.1	1.64	4.05	5.64	—	26,267	26,267	0.99	2.53	26,766
Mit.	56.5	50.9	90.1	0.14	1.78	23.7	25.1	1.64	4.05	5.64	—	26,267	26,267	0.99	2.53	26,766
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.5	19.2	36.8	0.06	0.57	9.76	10.3	0.53	1.96	2.49	—	11,817	11,817	0.41	0.94	12,121
Mit.	14.5	19.2	36.8	0.06	0.57	9.76	10.3	0.53	1.96	2.49	—	11,817	11,817	0.41	0.94	12,121
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.64	3.51	6.71	0.01	0.10	1.78	1.89	0.10	0.36	0.45	—	1,956	1,956	0.07	0.16	2,007
Mit.	2.64	3.51	6.71	0.01	0.10	1.78	1.89	0.10	0.36	0.45	—	1,956	1,956	0.07	0.16	2,007
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—

Mit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—
Mit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.48	22.4	65.5	0.08	0.60	13.5	14.1	0.56	2.75	3.31	—	18,253	18,253	0.62	1.40	18,742
2025	56.1	45.9	98.0	0.13	1.48	23.7	25.1	1.37	4.05	5.42	—	26,280	26,280	0.94	1.58	26,836
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	53.8	43.2	62.2	0.13	1.60	20.3	21.6	1.47	3.50	4.68	—	19,468	19,468	0.71	2.53	19,934
2025	56.5	50.9	90.1	0.14	1.78	23.7	25.1	1.64	4.05	5.64	—	26,267	26,267	0.99	1.59	26,766
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	8.84	19.2	36.8	0.06	0.57	9.76	10.3	0.53	1.96	2.49	—	11,817	11,817	0.41	0.94	12,121
2025	14.5	13.1	23.8	0.04	0.45	6.59	7.04	0.41	1.08	1.49	—	6,676	6,676	0.25	0.40	6,808
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.61	3.51	6.71	0.01	0.10	1.78	1.89	0.10	0.36	0.45	—	1,956	1,956	0.07	0.16	2,007
2025	2.64	2.40	4.35	0.01	0.08	1.20	1.28	0.08	0.20	0.27	—	1,105	1,105	0.04	0.07	1,127

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	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.48	22.4	65.5	0.08	0.60	13.5	14.1	0.56	2.75	3.31	—	18,253	18,253	0.62	1.40	18,742
2025	56.1	45.9	98.0	0.13	1.48	23.7	25.1	1.37	4.05	5.42	—	26,280	26,280	0.94	1.58	26,836
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	53.8	43.2	62.2	0.13	1.60	20.3	21.6	1.47	3.50	4.68	—	19,468	19,468	0.71	2.53	19,934
2025	56.5	50.9	90.1	0.14	1.78	23.7	25.1	1.64	4.05	5.64	—	26,267	26,267	0.99	1.59	26,766
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	8.84	19.2	36.8	0.06	0.57	9.76	10.3	0.53	1.96	2.49	—	11,817	11,817	0.41	0.94	12,121
2025	14.5	13.1	23.8	0.04	0.45	6.59	7.04	0.41	1.08	1.49	—	6,676	6,676	0.25	0.40	6,808
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.61	3.51	6.71	0.01	0.10	1.78	1.89	0.10	0.36	0.45	—	1,956	1,956	0.07	0.16	2,007
2025	2.64	2.40	4.35	0.01	0.08	1.20	1.28	0.08	0.20	0.27	—	1,105	1,105	0.04	0.07	1,127

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	55.4	60.8	263	0.83	1.60	53.0	54.6	1.53	13.6	15.1	1,350	103,350	104,700	140	8.86	111,115
Mit.	44.9	58.2	193	0.79	1.45	50.9	52.3	1.41	13.0	14.4	1,350	99,201	100,551	140	8.57	106,864

% Reduced	19%	4%	26%	4%	9%	4%	4%	8%	4%	4%	—	4%	4%	< 0.5%	3%	4%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	44.9	63.2	164	0.79	1.49	53.0	54.5	1.44	13.6	15.0	1,350	99,899	101,248	140	8.93	107,419
Mit.	44.5	60.9	158	0.76	1.45	50.9	52.3	1.41	13.0	14.4	1,350	96,083	97,432	140	8.63	103,511
% Reduced	1%	4%	4%	4%	3%	4%	4%	2%	4%	4%	—	4%	4%	< 0.5%	3%	4%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	51.8	64.3	213	0.80	1.57	52.4	53.9	1.50	13.4	14.9	1,350	100,300	101,649	140	8.95	107,936
Mit.	44.5	61.7	164	0.77	1.45	50.3	51.7	1.41	12.9	14.3	1,350	96,325	97,674	140	8.65	103,864
% Reduced	14%	4%	23%	4%	7%	4%	4%	6%	4%	4%	—	4%	4%	< 0.5%	3%	4%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.46	11.7	38.8	0.15	0.29	9.56	9.84	0.27	2.45	2.72	223	16,606	16,829	23.2	1.48	17,870
Mit.	8.12	11.3	29.9	0.14	0.27	9.17	9.44	0.26	2.35	2.61	223	15,948	16,171	23.2	1.43	17,196
% Reduced	14%	4%	23%	4%	7%	4%	4%	6%	4%	4%	—	4%	4%	< 0.5%	3%	4%
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—
Unmit.	Yes	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—
Mit.	No	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—

Unmit.	No	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—
Mit.	No	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.7	53.0	195	0.78	0.94	53.0	53.9	0.89	13.6	14.5	—	81,187	81,187	1.90	7.19	83,648
Area	44.4	0.52	61.8	< 0.005	0.11	—	0.11	0.08	—	0.08	—	254	254	0.01	< 0.005	255
Energy	0.40	7.29	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	19,038	19,038	1.52	0.11	19,108
Water	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Waste	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Off-Road	0.00	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	55.4	60.8	263	0.83	1.60	53.0	54.6	1.53	13.6	15.1	1,350	103,350	104,700	140	8.86	111,115
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.3	55.9	158	0.75	0.94	53.0	53.9	0.89	13.6	14.5	—	77,989	77,989	1.90	7.26	80,208
Area	34.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.40	7.29	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	19,038	19,038	1.52	0.11	19,108
Water	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Waste	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Off-Road	0.00	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	44.9	63.2	164	0.79	1.49	53.0	54.5	1.44	13.6	15.0	1,350	99,899	101,248	140	8.93	107,419
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.3	56.7	164	0.75	0.94	52.4	53.3	0.89	13.4	14.3	—	78,448	78,448	1.91	7.28	80,782

Area	41.2	0.36	42.3	< 0.005	0.08	—	0.08	0.06	—	0.06	—	174	174	0.01	< 0.005	175
Energy	0.40	7.29	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	18,806	18,806	1.51	0.11	18,876
Water	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Waste	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Off-Road	0.00	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	51.8	64.3	213	0.80	1.57	52.4	53.9	1.50	13.4	14.9	1,350	100,300	101,649	140	8.95	107,936
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.88	10.3	30.0	0.14	0.17	9.56	9.73	0.16	2.45	2.61	—	12,988	12,988	0.32	1.21	13,374
Area	7.51	0.07	7.72	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.8	28.8	< 0.005	< 0.005	28.9
Energy	0.07	1.33	1.12	0.01	0.10	—	0.10	0.10	—	0.10	—	3,114	3,114	0.25	0.02	3,125
Water	—	—	—	—	—	—	—	—	—	—	104	475	580	10.7	0.26	925
Waste	—	—	—	—	—	—	—	—	—	—	119	0.00	119	11.9	0.00	417
Off-Road	0.00	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	9.46	11.7	38.8	0.15	0.29	9.56	9.84	0.27	2.45	2.72	223	16,606	16,829	23.2	1.48	17,870

2.6. Operations Emissions by Sector, Mitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.2	50.9	187	0.75	0.90	50.9	51.8	0.86	13.0	13.9	—	77,939	77,939	1.82	6.91	80,302
Area	34.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.40	7.28	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	18,391	18,391	1.48	0.10	18,458
Water	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Waste	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Off-Road	0.00	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	44.9	58.2	193	0.79	1.45	50.9	52.3	1.41	13.0	14.4	1,350	99,201	100,551	140	8.57	106,864

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.88	53.7	152	0.72	0.90	50.9	51.8	0.86	13.0	13.9	—	74,870	74,870	1.83	6.97	76,999
Area	34.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.40	7.28	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	18,341	18,341	1.47	0.10	18,408
Water	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Waste	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Off-Road	0.00	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	44.5	60.9	158	0.76	1.45	50.9	52.3	1.41	13.0	14.4	1,350	96,083	97,432	140	8.63	103,511
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.87	54.4	158	0.72	0.90	50.3	51.2	0.86	12.9	13.7	—	75,310	75,310	1.83	6.99	77,550
Area	34.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.40	7.28	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	18,144	18,144	1.46	0.10	18,210
Water	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Waste	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Off-Road	0.00	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	44.5	61.7	164	0.77	1.45	50.3	51.7	1.41	12.9	14.3	1,350	96,325	97,674	140	8.65	103,864
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.80	9.93	28.8	0.13	0.16	9.17	9.34	0.16	2.35	2.51	—	12,468	12,468	0.30	1.16	12,839
Area	6.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.07	1.33	1.12	0.01	0.10	—	0.10	0.10	—	0.10	—	3,004	3,004	0.24	0.02	3,015
Water	—	—	—	—	—	—	—	—	—	—	104	475	580	10.7	0.26	925
Waste	—	—	—	—	—	—	—	—	—	—	119	0.00	119	11.9	0.00	417
Off-Road	0.00	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	8.12	11.3	29.9	0.14	0.27	9.17	9.44	0.26	2.35	2.61	223	15,948	16,171	23.2	1.43	17,196

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	ROG	NOx	CO	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	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	3,437
Demolition	—	—	—	—	—	12.4	12.4	—	1.87	1.87	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.36	1.19	< 0.005	0.06	—	0.06	0.05	—	0.05	—	188	188	0.01	< 0.005	188
Demolition	—	—	—	—	—	0.68	0.68	—	0.10	0.10	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	2.05	2.05	< 0.005	< 0.005	2.15
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.25	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	31.2
Demolition	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	0.36
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	0.95	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	0.01	0.01	201
Vendor	< 0.005	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	155	155	< 0.005	0.02	162
Hauling	0.23	18.0	4.23	0.10	0.29	3.95	4.24	0.29	1.11	1.40	—	15,287	15,287	0.27	2.46	16,028
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	11.2
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.51	8.51	< 0.005	< 0.005	8.90
Hauling	0.01	0.99	0.23	0.01	0.02	0.21	0.23	0.02	0.06	0.08	—	837	837	0.02	0.13	879
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	1.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	1.47
Hauling	< 0.005	0.18	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	139	139	< 0.005	0.02	145

3.2. Demolition (2024) - Mitigated

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

Location	ROG	NOx	CO	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	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	3,437

Demolition	—	—	—	—	—	12.4	12.4	—	1.87	1.87	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.36	1.19	< 0.005	0.06	—	0.06	0.05	—	0.05	—	188	188	0.01	< 0.005	188
Demolition	—	—	—	—	—	0.68	0.68	—	0.10	0.10	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	2.05	2.05	< 0.005	< 0.005	2.15
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.25	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	31.2
Demolition	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	0.36
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	0.95	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	0.01	0.01	201
Vendor	< 0.005	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	155	155	< 0.005	0.02	162
Hauling	0.23	18.0	4.23	0.10	0.29	3.95	4.24	0.29	1.11	1.40	—	15,287	15,287	0.27	2.46	16,028
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	11.2
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.51	8.51	< 0.005	< 0.005	8.90
Hauling	0.01	0.99	0.23	0.01	0.02	0.21	0.23	0.02	0.06	0.08	—	837	837	0.02	0.13	879
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	1.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	1.47
Hauling	< 0.005	0.18	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	139	139	< 0.005	0.02	145

3.3. Site Preparation (2024) - Unmitigated

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

Location	ROG	NOx	CO	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	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.79	0.72	< 0.005	0.04	—	0.04	0.03	—	0.03	—	116	116	< 0.005	< 0.005	116
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.06	0.06	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.82	0.82	< 0.005	< 0.005	0.86
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.14	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.2	19.2	< 0.005	< 0.005	19.3
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.10	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	231	231	0.01	0.01	234
Vendor	< 0.005	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	155	155	< 0.005	0.02	162
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	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.14	5.14	< 0.005	< 0.005	5.21
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.40	3.40	< 0.005	< 0.005	3.56
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	—	0.85	0.85	< 0.005	< 0.005	0.86
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.56	0.56	< 0.005	< 0.005	0.59
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. Site Preparation (2024) - Mitigated

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

Location	ROG	NOx	CO	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	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.79	0.72	< 0.005	0.04	—	0.04	0.03	—	0.03	—	116	116	< 0.005	< 0.005	116
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.06	0.06	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.82	0.82	< 0.005	< 0.005	0.86
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.14	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.2	19.2	< 0.005	< 0.005	19.3
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.10	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	231	231	0.01	0.01	234
Vendor	< 0.005	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	155	155	< 0.005	0.02	162
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	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.14	5.14	< 0.005	< 0.005	5.21
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.40	3.40	< 0.005	< 0.005	3.56
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	—	0.85	0.85	< 0.005	< 0.005	0.86
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.56	0.56	< 0.005	< 0.005	0.59
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. Grading (2024) - Unmitigated

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

Location	ROG	NOx	CO	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	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	6,621
Dust From Material Movement	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—

Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.91	2.56	0.01	0.12	—	0.12	0.11	—	0.11	—	560	560	0.02	< 0.005	562
Dust From Material Movement	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.30	0.30	< 0.005	0.03	0.03	—	3.18	3.18	< 0.005	< 0.005	3.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.53	0.47	< 0.005	0.02	—	0.02	0.02	—	0.02	—	92.8	92.8	< 0.005	< 0.005	93.1
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	0.53	0.53	< 0.005	< 0.005	0.55
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.11	1.26	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	265	265	0.01	0.01	268
Vendor	< 0.005	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	155	155	< 0.005	0.02	162
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	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	23.1
Vendor	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	13.8

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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	3.82
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.18	2.18	< 0.005	< 0.005	2.28
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. Grading (2024) - Mitigated

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

Location	ROG	NOx	CO	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	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	6,621
Dust From Material Movement	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.91	2.56	0.01	0.12	—	0.12	0.11	—	0.11	—	560	560	0.02	< 0.005	562
Dust From Material Movement	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.30	0.30	< 0.005	0.03	0.03	—	3.18	3.18	< 0.005	< 0.005	3.34

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.53	0.47	< 0.005	0.02	—	0.02	0.02	—	0.02	—	92.8	92.8	< 0.005	< 0.005	93.1
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	0.53	0.53	< 0.005	< 0.005	0.55
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.11	1.26	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	265	265	0.01	0.01	268
Vendor	< 0.005	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	155	155	< 0.005	0.02	162
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	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	23.1
Vendor	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	13.8
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	3.82
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.18	2.18	< 0.005	< 0.005	2.28
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. Building Construction (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.4	37.4	< 0.005	0.01	39.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	6.24	7.29	0.01	0.28	—	0.28	0.25	—	0.25	—	1,333	1,333	0.05	0.01	1,337
Onsite truck	< 0.005	0.03	0.01	< 0.005	< 0.005	1.95	1.95	< 0.005	0.20	0.20	—	20.8	20.8	< 0.005	< 0.005	21.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.14	1.33	< 0.005	0.05	—	0.05	0.05	—	0.05	—	221	221	0.01	< 0.005	221
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.36	0.36	< 0.005	0.04	0.04	—	3.45	3.45	< 0.005	< 0.005	3.62
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.06	2.88	49.8	0.00	0.00	7.80	7.80	0.00	1.83	1.83	—	8,588	8,588	0.36	0.30	8,720
Vendor	0.21	8.20	2.55	0.05	0.10	1.99	2.10	0.10	0.55	0.66	—	7,230	7,230	0.16	1.08	7,577

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	2.87	3.39	37.7	0.00	0.00	7.80	7.80	0.00	1.83	1.83	—	7,893	7,893	0.37	0.30	7,992
Vendor	0.20	8.58	2.61	0.05	0.10	1.99	2.10	0.10	0.55	0.66	—	7,234	7,234	0.16	1.09	7,563
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	1.59	1.89	22.0	0.00	0.00	4.28	4.28	0.00	1.00	1.00	—	4,443	4,443	0.21	0.16	4,505
Vendor	0.12	4.76	1.44	0.03	0.06	1.10	1.15	0.06	0.30	0.36	—	4,019	4,019	0.09	0.60	4,206
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	0.29	0.34	4.02	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	736	736	0.03	0.03	746
Vendor	0.02	0.87	0.26	0.01	0.01	0.20	0.21	0.01	0.06	0.07	—	665	665	0.01	0.10	696
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. Building Construction (2024) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.4	37.4	< 0.005	0.01	39.3

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	6.24	7.29	0.01	0.28	—	0.28	0.25	—	0.25	—	1,333	1,333	0.05	0.01	1,337
Onsite truck	< 0.005	0.03	0.01	< 0.005	< 0.005	1.95	1.95	< 0.005	0.20	0.20	—	20.8	20.8	< 0.005	< 0.005	21.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.14	1.33	< 0.005	0.05	—	0.05	0.05	—	0.05	—	221	221	0.01	< 0.005	221
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.36	0.36	< 0.005	0.04	0.04	—	3.45	3.45	< 0.005	< 0.005	3.62
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.06	2.88	49.8	0.00	0.00	7.80	7.80	0.00	1.83	1.83	—	8,588	8,588	0.36	0.30	8,720
Vendor	0.21	8.20	2.55	0.05	0.10	1.99	2.10	0.10	0.55	0.66	—	7,230	7,230	0.16	1.08	7,577
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	2.87	3.39	37.7	0.00	0.00	7.80	7.80	0.00	1.83	1.83	—	7,893	7,893	0.37	0.30	7,992
Vendor	0.20	8.58	2.61	0.05	0.10	1.99	2.10	0.10	0.55	0.66	—	7,234	7,234	0.16	1.09	7,563
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	1.59	1.89	22.0	0.00	0.00	4.28	4.28	0.00	1.00	1.00	—	4,443	4,443	0.21	0.16	4,505
Vendor	0.12	4.76	1.44	0.03	0.06	1.10	1.15	0.06	0.30	0.36	—	4,019	4,019	0.09	0.60	4,206
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	0.29	0.34	4.02	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	736	736	0.03	0.03	746
Vendor	0.02	0.87	0.26	0.01	0.01	0.20	0.21	0.01	0.06	0.07	—	665	665	0.01	0.10	696
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. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.9	36.9	< 0.005	0.01	38.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	2.58	3.22	0.01	0.11	—	0.11	0.10	—	0.10	—	591	591	0.02	< 0.005	593

Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.87	0.87	< 0.005	0.09	0.09	—	9.09	9.09	< 0.005	< 0.005	9.53
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.47	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	97.9	97.9	< 0.005	< 0.005	98.2
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	1.50	1.50	< 0.005	< 0.005	1.58
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.61	46.1	0.00	0.00	7.80	7.80	0.00	1.83	1.83	—	8,410	8,410	0.35	0.30	8,538
Vendor	0.16	7.82	2.43	0.05	0.10	1.99	2.10	0.10	0.55	0.66	—	7,124	7,124	0.16	1.08	7,471
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	2.51	2.88	34.8	0.00	0.00	7.80	7.80	0.00	1.83	1.83	—	7,731	7,731	0.36	0.30	7,829
Vendor	0.14	8.19	2.50	0.05	0.10	1.99	2.10	0.10	0.55	0.66	—	7,129	7,129	0.16	1.08	7,456
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	0.61	0.77	9.08	0.00	0.00	1.90	1.90	0.00	0.44	0.44	—	1,931	1,931	0.09	0.07	1,958
Vendor	0.04	2.02	0.61	0.01	0.03	0.49	0.51	0.03	0.13	0.16	—	1,757	1,757	0.04	0.27	1,840
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	0.11	0.14	1.66	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	320	320	0.01	0.01	324
Vendor	0.01	0.37	0.11	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	291	291	0.01	0.04	305
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. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	2,406
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.9	36.9	< 0.005	0.01	38.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	2.58	3.22	0.01	0.11	—	0.11	0.10	—	0.10	—	591	591	0.02	< 0.005	593
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.87	0.87	< 0.005	0.09	0.09	—	9.09	9.09	< 0.005	< 0.005	9.53
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.47	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	97.9	97.9	< 0.005	< 0.005	98.2
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	1.50	1.50	< 0.005	< 0.005	1.58
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.61	46.1	0.00	0.00	7.80	7.80	0.00	1.83	1.83	—	8,410	8,410	0.35	0.30	8,538
Vendor	0.16	7.82	2.43	0.05	0.10	1.99	2.10	0.10	0.55	0.66	—	7,124	7,124	0.16	1.08	7,471
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	2.51	2.88	34.8	0.00	0.00	7.80	7.80	0.00	1.83	1.83	—	7,731	7,731	0.36	0.30	7,829
Vendor	0.14	8.19	2.50	0.05	0.10	1.99	2.10	0.10	0.55	0.66	—	7,129	7,129	0.16	1.08	7,456
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	0.61	0.77	9.08	0.00	0.00	1.90	1.90	0.00	0.44	0.44	—	1,931	1,931	0.09	0.07	1,958
Vendor	0.04	2.02	0.61	0.01	0.03	0.49	0.51	0.03	0.13	0.16	—	1,757	1,757	0.04	0.27	1,840
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	0.11	0.14	1.66	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	320	320	0.01	0.01	324
Vendor	0.01	0.37	0.11	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	291	291	0.01	0.04	305
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. Onsite Paving (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	1,517
Paving	1.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.94	1.26	< 0.005	0.04	—	0.04	0.04	—	0.04	—	190	190	0.01	< 0.005	191
Paving	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.44	0.44	< 0.005	0.04	0.04	—	4.65	4.65	< 0.005	< 0.005	4.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.17	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	31.6
Paving	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.77	0.77	< 0.005	< 0.005	0.81
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	1.16	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	215
Vendor	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.8	24.8	< 0.005	< 0.005	25.2
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.3	19.3	< 0.005	< 0.005	20.2
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.11	4.11	< 0.005	< 0.005	4.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	3.34
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. Onsite Paving (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	1,517
Paving	1.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.94	1.26	< 0.005	0.04	—	0.04	0.04	—	0.04	—	190	190	0.01	< 0.005	191
Paving	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.44	0.44	< 0.005	0.04	0.04	—	4.65	4.65	< 0.005	< 0.005	4.87

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.17	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	31.6
Paving	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.77	0.77	< 0.005	< 0.005	0.81
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	1.16	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	215
Vendor	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.8	24.8	< 0.005	< 0.005	25.2
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.3	19.3	< 0.005	< 0.005	20.2
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.11	4.11	< 0.005	< 0.005	4.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	3.34
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

3.13. Architectural Coating (2024) - Unmitigated

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

Location	ROG	NOx	CO	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	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	134
Architectural Coatings	48.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.9	15.9	< 0.005	< 0.005	16.0
Architectural Coatings	5.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	4.47	4.47	< 0.005	< 0.005	4.69
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.64	2.64	< 0.005	< 0.005	2.65
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.74	0.74	< 0.005	< 0.005	0.78
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.68	7.53	0.00	0.00	1.56	1.56	0.00	0.37	0.37	—	1,579	1,579	0.07	0.06	1,598
Vendor	< 0.005	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	155	155	< 0.005	0.02	162
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	0.07	0.08	0.95	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	191	191	0.01	0.01	194
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.5	18.5	< 0.005	< 0.005	19.4
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	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	32.0
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	3.21
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

3.14. Architectural Coating (2024) - Mitigated

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

Location	ROG	NOx	CO	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	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	134
Architectural Coatings	48.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	37.5	37.5	< 0.005	0.01	39.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.9	15.9	< 0.005	< 0.005	16.0
Architectural Coatings	5.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	4.47	4.47	< 0.005	< 0.005	4.69
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.64	2.64	< 0.005	< 0.005	2.65
Architectural Coatings	1.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.74	0.74	< 0.005	< 0.005	0.78
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.68	7.53	0.00	0.00	1.56	1.56	0.00	0.37	0.37	—	1,579	1,579	0.07	0.06	1,598
Vendor	< 0.005	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	155	155	< 0.005	0.02	162
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	0.07	0.08	0.95	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	191	191	0.01	0.01	194
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.5	18.5	< 0.005	< 0.005	19.4

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	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	32.0
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	3.21
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

3.15. Architectural Coating (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	134
Architectural Coatings	48.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	134
Architectural Coatings	48.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.9	36.9	< 0.005	0.01	38.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.22	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.0	34.0	< 0.005	< 0.005	34.1
Architectural Coatings	12.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.89	0.89	< 0.005	0.09	0.09	—	9.38	9.38	< 0.005	< 0.005	9.83
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.62	5.62	< 0.005	< 0.005	5.64
Architectural Coatings	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	1.55	1.55	< 0.005	< 0.005	1.63
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.52	9.22	0.00	0.00	1.56	1.56	0.00	0.37	0.37	—	1,682	1,682	0.07	0.06	1,708
Vendor	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	0.50	0.58	6.96	0.00	0.00	1.56	1.56	0.00	0.37	0.37	—	1,546	1,546	0.07	0.06	1,566
Vendor	< 0.005	0.18	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	0.13	0.16	1.87	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	398	398	0.02	0.02	404
Vendor	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.9	38.9	< 0.005	0.01	40.8

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	0.02	0.03	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	66.9
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.44	6.44	< 0.005	< 0.005	6.75
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

3.16. Architectural Coating (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	134
Architectural Coatings	48.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	134
Architectural Coatings	48.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.9	36.9	< 0.005	0.01	38.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.22	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.0	34.0	< 0.005	< 0.005	34.1
Architectural Coatings	12.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	0.02	0.01	< 0.005	< 0.005	0.89	0.89	< 0.005	0.09	0.09	—	9.38	9.38	< 0.005	< 0.005	9.83
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.62	5.62	< 0.005	< 0.005	5.64
Architectural Coatings	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	1.55	1.55	< 0.005	< 0.005	1.63
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.52	9.22	0.00	0.00	1.56	1.56	0.00	0.37	0.37	—	1,682	1,682	0.07	0.06	1,708
Vendor	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	0.50	0.58	6.96	0.00	0.00	1.56	1.56	0.00	0.37	0.37	—	1,546	1,546	0.07	0.06	1,566
Vendor	< 0.005	0.18	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	0.13	0.16	1.87	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	398	398	0.02	0.02	404
Vendor	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.9	38.9	< 0.005	0.01	40.8

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	0.02	0.03	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	66.9
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.44	6.44	< 0.005	< 0.005	6.75
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

3.17. Grubbing & Land Clearing (2025) - Unmitigated

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

Location	ROG	NOx	CO	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	0.39	3.39	3.49	< 0.005	0.21	—	0.21	0.19	—	0.19	—	490	490	0.02	< 0.005	492
Dust From Material Movement	—	—	—	—	—	0.14	0.14	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.9	36.9	< 0.005	0.01	38.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.9	26.9	< 0.005	< 0.005	27.0
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	2.02	2.02	< 0.005	< 0.005	2.12

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.45	4.45	< 0.005	< 0.005	4.46
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	0.35
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	130	130	0.01	< 0.005	131
Vendor	< 0.005	0.18	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	—	7.19	7.19	< 0.005	< 0.005	7.29
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.38	8.38	< 0.005	< 0.005	8.78
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	—	1.19	1.19	< 0.005	< 0.005	1.21
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.39	1.39	< 0.005	< 0.005	1.45
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

3.18. Grubbing & Land Clearing (2025) - Mitigated

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

Location	ROG	NOx	CO	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	0.39	3.39	3.49	< 0.005	0.21	—	0.21	0.19	—	0.19	—	490	490	0.02	< 0.005	492
Dust From Material Movement	—	—	—	—	—	0.14	0.14	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.9	36.9	< 0.005	0.01	38.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.9	26.9	< 0.005	< 0.005	27.0
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	2.02	2.02	< 0.005	< 0.005	2.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.45	4.45	< 0.005	< 0.005	4.46
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	0.35
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	130	130	0.01	< 0.005	131
Vendor	< 0.005	0.18	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	—	7.19	7.19	< 0.005	< 0.005	7.29
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.38	8.38	< 0.005	< 0.005	8.78
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	—	1.19	1.19	< 0.005	< 0.005	1.21
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.39	1.39	< 0.005	< 0.005	1.45
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

3.19. Grading & Excavation (2025) - Unmitigated

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

Location	ROG	NOx	CO	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	3.11	27.3	29.4	0.06	1.21	—	1.21	1.11	—	1.11	—	6,496	6,496	0.26	0.05	6,518

Dust From Material Movement	—	—	—	—	—	0.83	0.83	—	0.09	0.09	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	2.97	2.97	< 0.005	0.30	0.30	—	30.2	30.2	< 0.005	< 0.005	31.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	1.50	1.61	< 0.005	0.07	—	0.07	0.06	—	0.06	—	356	356	0.01	< 0.005	357
Dust From Material Movement	—	—	—	—	—	0.05	0.05	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.15	0.15	< 0.005	0.02	0.02	—	1.65	1.65	< 0.005	< 0.005	1.73
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.9	58.9	< 0.005	< 0.005	59.1
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	0.29
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.17	2.04	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	453	453	0.02	0.02	459
Vendor	< 0.005	0.14	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	128
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	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	25.2	25.2	< 0.005	< 0.005	25.5
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.71	6.71	< 0.005	< 0.005	7.02
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.17	4.17	< 0.005	< 0.005	4.23
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	1.16
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

3.20. Grading & Excavation (2025) - Mitigated

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

Location	ROG	NOx	CO	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	3.11	27.3	29.4	0.06	1.21	—	1.21	1.11	—	1.11	—	6,496	6,496	0.26	0.05	6,518
Dust From Material Movement	—	—	—	—	—	0.83	0.83	—	0.09	0.09	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	2.97	2.97	< 0.005	0.30	0.30	—	30.2	30.2	< 0.005	< 0.005	31.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	1.50	1.61	< 0.005	0.07	—	0.07	0.06	—	0.06	—	356	356	0.01	< 0.005	357
Dust From Material Movement	—	—	—	—	—	0.05	0.05	—	< 0.005	< 0.005	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.15	0.15	< 0.005	0.02	0.02	—	1.65	1.65	< 0.005	< 0.005	1.73
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.9	58.9	< 0.005	< 0.005	59.1
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	0.29
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.17	2.04	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	453	453	0.02	0.02	459
Vendor	< 0.005	0.14	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	128
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	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	25.2	25.2	< 0.005	< 0.005	25.5
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.71	6.71	< 0.005	< 0.005	7.02
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.17	4.17	< 0.005	< 0.005	4.23
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	1.16
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

3.21. Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.51	22.9	23.6	0.05	0.91	—	0.91	0.84	—	0.84	—	5,694	5,694	0.23	0.05	5,713
Dust From Material Movement	—	—	—	—	—	0.69	0.69	—	0.07	0.07	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.51	22.9	23.6	0.05	0.91	—	0.91	0.84	—	0.84	—	5,694	5,694	0.23	0.05	5,713
Dust From Material Movement	—	—	—	—	—	0.69	0.69	—	0.07	0.07	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.9	36.9	< 0.005	0.01	38.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	3.77	3.88	0.01	0.15	—	0.15	0.14	—	0.14	—	936	936	0.04	0.01	939
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	6.06	6.06	< 0.005	< 0.005	6.35
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08	0.69	0.71	< 0.005	0.03	—	0.03	0.03	—	0.03	—	155	155	0.01	< 0.005	155
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	1.00	1.00	< 0.005	< 0.005	1.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	2.32	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	423	423	0.02	0.01	429
Vendor	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	0.13	0.14	1.75	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	389	389	0.02	0.01	394
Vendor	< 0.005	0.18	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	0.02	0.03	0.30	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	64.7	64.7	< 0.005	< 0.005	65.6
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.2	25.2	< 0.005	< 0.005	26.3
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	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	10.9
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.16	4.16	< 0.005	< 0.005	4.36
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

3.22. Drainage, Utilities, & Sub-Grade (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.51	22.9	23.6	0.05	0.91	—	0.91	0.84	—	0.84	—	5,694	5,694	0.23	0.05	5,713
Dust From Material Movement	—	—	—	—	—	0.69	0.69	—	0.07	0.07	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.51	22.9	23.6	0.05	0.91	—	0.91	0.84	—	0.84	—	5,694	5,694	0.23	0.05	5,713
Dust From Material Movement	—	—	—	—	—	0.69	0.69	—	0.07	0.07	—	—	—	—	—	—
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.9	36.9	< 0.005	0.01	38.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	3.77	3.88	0.01	0.15	—	0.15	0.14	—	0.14	—	936	936	0.04	0.01	939
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.58	0.58	< 0.005	0.06	0.06	—	6.06	6.06	< 0.005	< 0.005	6.35

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.69	0.71	< 0.005	0.03	—	0.03	0.03	—	0.03	—	155	155	0.01	< 0.005	155
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	1.00	1.00	< 0.005	< 0.005	1.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	2.32	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	423	423	0.02	0.01	429
Vendor	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	0.13	0.14	1.75	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	389	389	0.02	0.01	394
Vendor	< 0.005	0.18	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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	0.02	0.03	0.30	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	64.7	64.7	< 0.005	< 0.005	65.6
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.2	25.2	< 0.005	< 0.005	26.3
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	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	10.9
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.16	4.16	< 0.005	< 0.005	4.36
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

3.23. Road Paving (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	7.71	10.8	0.01	0.34	—	0.34	0.31	—	0.31	—	1,620	1,620	0.07	0.01	1,625
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.74	1.03	< 0.005	0.03	—	0.03	0.03	—	0.03	—	155	155	0.01	< 0.005	156
Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.34	0.34	< 0.005	0.03	0.03	—	3.53	3.53	< 0.005	< 0.005	3.71
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.13	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.7	25.7	< 0.005	< 0.005	25.8
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	0.59	0.59	< 0.005	< 0.005	0.61
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	1.74	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	317	317	0.01	0.01	322
Vendor	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.3	28.3	< 0.005	< 0.005	28.7
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	15.4
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	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.69	4.69	< 0.005	< 0.005	4.75
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.43	2.43	< 0.005	< 0.005	2.54
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

3.24. Road Paving (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	7.71	10.8	0.01	0.34	—	0.34	0.31	—	0.31	—	1,620	1,620	0.07	0.01	1,625
Onsite truck	< 0.005	0.06	0.02	< 0.005	< 0.005	3.71	3.71	< 0.005	0.37	0.37	—	36.8	36.8	< 0.005	0.01	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.74	1.03	< 0.005	0.03	—	0.03	0.03	—	0.03	—	155	155	0.01	< 0.005	156

Onsite truck	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.34	0.34	< 0.005	0.03	0.03	—	3.53	3.53	< 0.005	< 0.005	3.71
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.13	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.7	25.7	< 0.005	< 0.005	25.8
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	0.59	0.59	< 0.005	< 0.005	0.61
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	1.74	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	317	317	0.01	0.01	322
Vendor	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	160
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.3	28.3	< 0.005	< 0.005	28.7
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	15.4
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	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.69	4.69	< 0.005	< 0.005	4.75
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.43	2.43	< 0.005	< 0.005	2.54
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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	10.7	53.0	195	0.78	0.94	53.0	53.9	0.89	13.6	14.5	—	81,187	81,187	1.90	7.19	83,648
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	10.7	53.0	195	0.78	0.94	53.0	53.9	0.89	13.6	14.5	—	81,187	81,187	1.90	7.19	83,648
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	10.3	55.9	158	0.75	0.94	53.0	53.9	0.89	13.6	14.5	—	77,989	77,989	1.90	7.26	80,208
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	10.3	55.9	158	0.75	0.94	53.0	53.9	0.89	13.6	14.5	—	77,989	77,989	1.90	7.26	80,208
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.88	10.3	30.0	0.14	0.17	9.56	9.73	0.16	2.45	2.61	—	12,988	12,988	0.32	1.21	13,374
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	1.88	10.3	30.0	0.14	0.17	9.56	9.73	0.16	2.45	2.61	—	12,988	12,988	0.32	1.21	13,374

4.1.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	10.2	50.9	187	0.75	0.90	50.9	51.8	0.86	13.0	13.9	—	77,939	77,939	1.82	6.91	80,302
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	10.2	50.9	187	0.75	0.90	50.9	51.8	0.86	13.0	13.9	—	77,939	77,939	1.82	6.91	80,302
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	9.88	53.7	152	0.72	0.90	50.9	51.8	0.86	13.0	13.9	—	74,870	74,870	1.83	6.97	76,999
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	9.88	53.7	152	0.72	0.90	50.9	51.8	0.86	13.0	13.9	—	74,870	74,870	1.83	6.97	76,999
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.80	9.93	28.8	0.13	0.16	9.17	9.34	0.16	2.35	2.51	—	12,468	12,468	0.30	1.16	12,839
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	1.80	9.93	28.8	0.13	0.16	9.17	9.34	0.16	2.35	2.51	—	12,468	12,468	0.30	1.16	12,839

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	8,119	8,119	0.59	0.07	8,155
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	1,421	1,421	0.10	0.01	1,428
undefined	—	—	—	—	—	—	—	—	—	—	—	805	805	0.06	0.01	808
Total	—	—	—	—	—	—	—	—	—	—	—	10,345	10,345	0.75	0.09	10,391
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	8,119	8,119	0.59	0.07	8,155
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	1,421	1,421	0.10	0.01	1,428
undefined	—	—	—	—	—	—	—	—	—	—	—	805	805	0.06	0.01	808
Total	—	—	—	—	—	—	—	—	—	—	—	10,345	10,345	0.75	0.09	10,391
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,344	1,344	0.10	0.01	1,350
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	235	235	0.02	< 0.005	236
undefined	—	—	—	—	—	—	—	—	—	—	—	94.9	94.9	0.01	< 0.005	95.3
Total	—	—	—	—	—	—	—	—	—	—	—	1,674	1,674	0.12	0.01	1,682

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	7,474	7,474	0.54	0.07	7,508
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	1,421	1,421	0.10	0.01	1,428
Road Construction	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	805	805	0.06	0.01	808
Total	—	—	—	—	—	—	—	—	—	—	—	9,701	9,701	0.71	0.09	9,744
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	7,425	7,425	0.54	0.07	7,458
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	1,421	1,421	0.10	0.01	1,428
undefined	—	—	—	—	—	—	—	—	—	—	—	805	805	0.06	0.01	808
Total	—	—	—	—	—	—	—	—	—	—	—	9,651	9,651	0.70	0.09	9,694
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,235	1,235	0.09	0.01	1,240
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	235	235	0.02	< 0.005	236
Road Construction	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	94.9	94.9	0.01	< 0.005	95.3
Total	—	—	—	—	—	—	—	—	—	—	—	1,565	1,565	0.11	0.01	1,572

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.40	7.29	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	8,693	8,693	0.77	0.02	8,717

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	0.40	7.29	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	8,693	8,693	0.77	0.02	8,717
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.40	7.29	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	8,693	8,693	0.77	0.02	8,717
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	0.40	7.29	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	8,693	8,693	0.77	0.02	8,717
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.07	1.33	1.12	0.01	0.10	—	0.10	0.10	—	0.10	—	1,439	1,439	0.13	< 0.005	1,443
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	0.07	1.33	1.12	0.01	0.10	—	0.10	0.10	—	0.10	—	1,439	1,439	0.13	< 0.005	1,443

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	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	0.40	7.28	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	8,690	8,690	0.77	0.02	8,714
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	0.40	7.28	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	8,690	8,690	0.77	0.02	8,714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.40	7.28	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	8,690	8,690	0.77	0.02	8,714
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	0.40	7.28	6.12	0.04	0.55	—	0.55	0.55	—	0.55	—	8,690	8,690	0.77	0.02	8,714
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.07	1.33	1.12	0.01	0.10	—	0.10	0.10	—	0.10	—	1,439	1,439	0.13	< 0.005	1,443
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	0.07	1.33	1.12	0.01	0.10	—	0.10	0.10	—	0.10	—	1,439	1,439	0.13	< 0.005	1,443

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	10.1	0.52	61.8	< 0.005	0.11	—	0.11	0.08	—	0.08	—	254	254	0.01	< 0.005	255
Total	44.4	0.52	61.8	< 0.005	0.11	—	0.11	0.08	—	0.08	—	254	254	0.01	< 0.005	255
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	34.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.27	0.07	7.72	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.8	28.8	< 0.005	< 0.005	28.9
Total	7.51	0.07	7.72	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.8	28.8	< 0.005	< 0.005	28.9

4.3.2. Mitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	34.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	34.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	104	475	580	10.7	0.26	925
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	104	475	580	10.7	0.26	925

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	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	630	2,871	3,501	64.8	1.56	5,585
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	104	475	580	10.7	0.26	925
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	104	475	580	10.7	0.26	925

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	119	0.00	119	11.9	0.00	417

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	119	0.00	119	11.9	0.00	417

4.5.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	720	0.00	720	71.9	0.00	2,519
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	119	0.00	119	11.9	0.00	417
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	119	0.00	119	11.9	0.00	417

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

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

Land Use	ROG	NOx	CO	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Material Handling Equipment	0.00	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	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Material Handling Equipment	0.00	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	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Other Material Handling Equipment	0.00	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	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.7.2. Mitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Material Handling Equipment	0.00	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	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Material Handling Equipment	0.00	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	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Material Handling Equipment	0.00	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	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

Equipment Type	ROG	NOx	CO	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. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	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)

Equipment Type	ROG	NOx	CO	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. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	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	CO	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

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	ROG	NOx	CO	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)

Land Use	ROG	NOx	CO	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

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/2/2024	1/29/2024	5.00	20.0	—
Site Preparation	Site Preparation	1/30/2024	2/8/2024	5.00	8.00	—
Grading	Grading	2/9/2024	3/22/2024	5.00	31.0	—
Building Construction	Building Construction	3/23/2024	5/6/2025	5.00	292	—
Onsite Paving	Paving	5/7/2025	7/9/2025	5.00	46.0	—
Architectural Coating	Architectural Coating	11/1/2024	5/10/2025	5.00	136	—
Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/1/2025	1/28/2025	5.00	20.0	—

Grading & Excavation	Linear, Grading & Excavation	1/29/2025	2/25/2025	5.00	20.0	—
Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	2/26/2025	5/20/2025	5.00	60.0	—
Road Paving	Linear, Paving	5/21/2025	7/8/2025	5.00	35.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Onsite Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Onsite Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Onsite Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grubbing & Land Clearing	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grubbing & Land Clearing	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Grading & Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading & Excavation	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2.00	8.00	423	0.48

Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Road Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Road Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Road Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Road Paving	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Road Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Tractors/Loaders/Backh	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Onsite Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Onsite Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Onsite Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grubbing & Land Clearing	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grubbing & Land Clearing	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Grading & Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading & Excavation	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74

Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Road Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Road Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Road Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Road Paving	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Road Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

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	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	5.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	2.00	5.00	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	5.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	2.00	5.00	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	597	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	233	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	2.00	5.00	HHDT
Onsite Paving	—	—	—	—
Onsite Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Onsite Paving	Vendor	5.00	10.2	HHDT,MHDT
Onsite Paving	Hauling	0.00	20.0	HHDT
Onsite Paving	Onsite truck	2.00	5.00	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	119	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	5.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	2.00	5.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	5.00	10.2	HHDT,MHDT
Demolition	Hauling	218	20.0	HHDT
Demolition	Onsite truck	2.00	5.00	HHDT
Grubbing & Land Clearing	—	—	—	—
Grubbing & Land Clearing	Worker	10.0	18.5	LDA,LDT1,LDT2
Grubbing & Land Clearing	Vendor	5.00	10.2	HHDT,MHDT
Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Grubbing & Land Clearing	Onsite truck	2.00	5.00	HHDT
Grading & Excavation	—	—	—	—
Grading & Excavation	Worker	35.0	18.5	LDA,LDT1,LDT2

Grading & Excavation	Vendor	4.00	10.2	HHDT,MHDT
Grading & Excavation	Hauling	0.00	20.0	HHDT
Grading & Excavation	Onsite truck	2.00	4.00	HHDT
Drainage, Utilities, & Sub-Grade	—	—	—	—
Drainage, Utilities, & Sub-Grade	Worker	30.0	18.5	LDA,LDT1,LDT2
Drainage, Utilities, & Sub-Grade	Vendor	5.00	10.2	HHDT,MHDT
Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Drainage, Utilities, & Sub-Grade	Onsite truck	2.00	5.00	HHDT
Road Paving	—	—	—	—
Road Paving	Worker	22.5	18.5	LDA,LDT1,LDT2
Road Paving	Vendor	5.00	10.2	HHDT,MHDT
Road Paving	Hauling	0.00	20.0	HHDT
Road Paving	Onsite truck	2.00	5.00	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	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	5.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	2.00	5.00	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	5.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	2.00	5.00	HHDT
Building Construction	—	—	—	—

Building Construction	Worker	597	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	233	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	2.00	5.00	HHDT
Onsite Paving	—	—	—	—
Onsite Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Onsite Paving	Vendor	5.00	10.2	HHDT,MHDT
Onsite Paving	Hauling	0.00	20.0	HHDT
Onsite Paving	Onsite truck	2.00	5.00	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	119	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	5.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	2.00	5.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	5.00	10.2	HHDT,MHDT
Demolition	Hauling	218	20.0	HHDT
Demolition	Onsite truck	2.00	5.00	HHDT
Grubbing & Land Clearing	—	—	—	—
Grubbing & Land Clearing	Worker	10.0	18.5	LDA,LDT1,LDT2
Grubbing & Land Clearing	Vendor	5.00	10.2	HHDT,MHDT
Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Grubbing & Land Clearing	Onsite truck	2.00	5.00	HHDT
Grading & Excavation	—	—	—	—
Grading & Excavation	Worker	35.0	18.5	LDA,LDT1,LDT2
Grading & Excavation	Vendor	4.00	10.2	HHDT,MHDT

Grading & Excavation	Hauling	0.00	20.0	HHDT
Grading & Excavation	Onsite truck	2.00	4.00	HHDT
Drainage, Utilities, & Sub-Grade	—	—	—	—
Drainage, Utilities, & Sub-Grade	Worker	30.0	18.5	LDA,LDT1,LDT2
Drainage, Utilities, & Sub-Grade	Vendor	5.00	10.2	HHDT,MHDT
Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Drainage, Utilities, & Sub-Grade	Onsite truck	2.00	5.00	HHDT
Road Paving	—	—	—	—
Road Paving	Worker	22.5	18.5	LDA,LDT1,LDT2
Road Paving	Vendor	5.00	10.2	HHDT,MHDT
Road Paving	Hauling	0.00	20.0	HHDT
Road Paving	Onsite truck	2.00	5.00	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	2,121,000	707,000	36,590

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	17,450	—
Site Preparation	0.00	0.00	27.0	0.00	—
Grading	0.00	0.00	93.0	0.00	—
Onsite Paving	0.00	0.00	0.00	0.00	41.9
Grubbing & Land Clearing	0.00	0.00	11.5	0.00	—
Grading & Excavation	0.00	0.00	11.5	0.00	—
Drainage, Utilities, & Sub-Grade	0.00	0.00	11.5	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Road Construction	11.9	100%
Parking Lot	30.0	25%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	453	0.03	< 0.005

2025	235	453	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
Unrefrigerated Warehouse-No Rail	1,989	1,989	1,989	726,131	72,109	72,109	72,109	26,319,673
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
Unrefrigerated Warehouse-No Rail	1,910	1,910	1,910	697,086	69,224	69,224	69,224	25,266,886
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	2,131,083	710,361	78,408

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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)
Unrefrigerated Warehouse-No Rail	6,538,662	453	0.0330	0.0040	27,124,683
Parking Lot	1,144,757	453	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)
Unrefrigerated Warehouse-No Rail	5,979,873	453	0.0330	0.0040	27,115,638
Parking Lot	1,144,757	453	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)
Unrefrigerated Warehouse-No Rail	328,606,250	14,252,889
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	328,606,250	14,252,889
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	1,336	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	1,336	—
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

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

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
Other Material Handling Equipment	Electric	Average	8.00	8.00	93.0	0.40

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Other Material Handling Equipment	Electric	Average	8.00	8.00	93.0	0.40

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	Project is in the City of Banning, a suburban setting
Construction: Construction Phases	Site has minor structures. Construction schedule based on provided 18 month schedule, assume architectural coatings applied during building construction and paving. Assume roadway construction would finish concurrently with the land development.
Construction: Architectural Coatings	Assumed all architectural coatings comply with SCAQMD Rule 1113.
Operations: Vehicle Data	Traffic study specified a total vehicle trip rate of 1.40 and a truck trip rate of 0.22. Assumed haul truck trip lengths average 40 miles.
Operations: Fleet Mix	Traffic study shows HHD at 15.7%, Autos at 84.3%. Split the Autos: LDA-53.8%, LDT1-4%, LDT2-20.1%, LHD1-3.2%, LHD2-0.9%, & MCY-2.3% (all CalEEMod defaults except LDA).
Operations: Architectural Coatings	Assume all coatings comply with SCAQMD Rule 1113.
Operations: Off-Road Equipment	Assume 8 warehouse material handling equipment, all electrically powered.
Construction: Paving	Paved area 1,307,460sqft (30 acres) per project plans. Assumed 25% asphalt for onsite. 1.48 miles of roadway = 11.92 acres.
Operations: Refrigerants	Project is an unrefrigerated warehouse, assumed office air-conditioned
Construction: Dust From Material Movement	No material imported or exported.
Land Use	The site is 94.86 acres, the building is 1,420,722 square feet. 1.48 miles of road (covering 11.92 acres) will be constructed surrounding the site.
Construction: Off-Road Equipment	Removed electric signal boards (no emissions)
Construction: Trips and VMT	Added vendor and onsite trucks to prevent "infinity" emissions results.

ATTACHMENT D

ENERGY WORKSHEETS

Construction Diesel Fuel Consumption Worksheet

Data from CalEEMod Analysis

5. Activity Data

5.1 Construction Schedule

Phase Name	Phase Type	Start Date	End Date	ays Per Wee	Days per Phase
Demolition	Demolition	1/2/2024	1/29/2024	5	20
Site Preparation	Site Preparation	1/30/2024	2/8/2024	5	8
Grading	Grading	2/9/2024	3/22/2024	5	31
Building Construction	Building Construction	3/23/2024	5/6/2025	5	292
Onsite Paving	Paving	5/7/2025	7/9/2025	5	46
Architectural Coating	Architectural Coating	11/1/2024	5/10/2025	5	136
Grubbing & Land Clearing	Linear, Grubbing & Land Clearin	1/1/2025	1/28/2025	5	20
Grading & Excavation	Linear, Grading & Excavation	1/29/2025	2/25/2025	5	20
Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sut	2/26/2025	5/20/2025	5	60
Road Paving	Linear, Paving	5/21/2025	7/8/2025	5	35
			Total work days:		668
			Total months:		30

5.2. Off-Road Equipment

5.2.1 Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	mber per D	ours Per Da	Horsepowe	Load Factor	Fuel Consumption (gal/hp-hr)	Fuel Consumption (gal/hr)	Hours Used	Fuel Used (gal)	Fuel by Phase
Demolition	Concrete/Industrial Saws	Diesel	Average	1	8	33	0.73	0.0421	11.11	20	222	
Demolition	Excavators	Diesel	Average	3	8	36	0.38	0.0220	6.33	60	380	3,007
Demolition	Rubber Tired Dozers	Diesel	Average	2	8	367	0.4	0.0205	60.13	40	2,405	
Site Preparation	Rubber Tired Dozers	Diesel	Average	3	8	367	0.4	0.0205	60.13	24	1,443	1,855
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4	8	84	0.37	0.0191	12.86	32	411	
Grading	Excavators	Diesel	Average	2	8	36	0.38	0.0220	6.33	62	392	
Grading	Graders	Diesel	Average	1	8	148	0.41	0.0212	25.14	31	779	
Grading	Rubber Tired Dozers	Diesel	Average	1	8	367	0.4	0.0205	60.13	31	1,864	9,079
Grading	Scrapers	Diesel	Average	2	8	423	0.48	0.0250	84.61	62	5,246	
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2	8	84	0.37	0.0191	12.86	62	797	
Building Construction	Cranes	Diesel	Average	1	7	367	0.29	0.0149	38.26	292	11,172	
Building Construction	Forklifts	Diesel	Average	3	8	82	0.2	0.0103	6.78	876	5,936	
Building Construction	Generator Sets	Diesel	Average	1	8	14	0.74	0.0423	4.74	292	1,384	31,772
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3	7	84	0.37	0.0191	11.25	876	9,856	
Building Construction	Welders	Diesel	Average	1	8	46	0.45	0.0258	9.50	292	2,774	
Architectural Coating	Air Compressors	Diesel	Average	1	6	37	0.48	0.0216	4.79	136	651	
Onsite Paving	Pavers	Diesel	Average	2	8	81	0.42	0.0276	17.86	92	1,643	
Onsite Paving	Paving Equipment	Diesel	Average	2	8	89	0.36	0.0213	15.19	92	1,397	3,528
Onsite Paving	Rollers	Diesel	Average	2	8	36	0.38	0.0184	5.29	92	487	
Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1	8	87	0.43	0.0222	15.46	20	309	
Grubbing & Land Clearing	Excavators	Diesel	Average	1	8	36	0.38	0.0220	6.33	20	127	436
Grubbing & Land Clearing	Signal Boards	Electric	Average	2	8	6	0.82	0.0000	0.00	40	0	
Grading & Excavation	Crawler Tractors	Diesel	Average	1	8	87	0.43	0.0222	15.46	20	309	
Grading & Excavation	Excavators	Diesel	Average	3	8	36	0.38	0.0220	6.33	60	380	
Grading & Excavation	Graders	Diesel	Average	1	8	148	0.41	0.0212	25.14	20	503	
Grading & Excavation	Rollers	Diesel	Average	2	8	36	0.38	0.0184	5.29	40	212	5,794
Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1	8	150	0.36	0.0205	24.58	20	492	
Grading & Excavation	Scrapers	Diesel	Average	2	8	423	0.48	0.0250	84.61	40	3,384	
Grading & Excavation	Signal Boards	Electric	Average	2	8	6	0.82	0.0000	0.00	40	0	
Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2	8	84	0.37	0.0191	12.86	40	514	
Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1	8	37	0.48	0.0216	6.39	60	383	
Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1	8	14	0.74	0.0423	4.74	60	284	
Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1	8	148	0.41	0.0212	25.14	60	1,508	
Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1	8	8	0.43	0.0197	1.26	60	75	
Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1	8	11	0.74	0.0423	3.73	60	224	15,130
Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1	8	96	0.4	0.0208	15.99	60	959	
Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2	8	423	0.48	0.0250	84.61	120	10,153	
Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	2	8	6	0.82	0.0000	0.00	120	0	
Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2	8	84	0.37	0.0191	12.86	120	1,543	
Road Paving	Pavers	Diesel	Average	1	8	81	0.42	0.0276	17.86	35	625	
Road Paving	Paving Equipment	Diesel	Average	1	8	89	0.36	0.0213	15.19	35	532	
Road Paving	Rollers	Diesel	Average	3	8	36	0.38	0.0184	5.29	105	556	2,612
Road Paving	Signal Boards	Electric	Average	2	8	6	0.82	0.0000	0.00	70	0	
Road Paving	Tractors/Loaders/Backhoes	Diesel	Average	2	8	84	0.37	0.0191	12.86	70	900	
									Total Diesel Fuel Used for 18-Month Construction (gal)			73,212

Assume equipment used every day.

1

Fuel Consumption rate from OFFROAD model

Construction Source	Number	Average Trip Length	VMT	Fuel Rate	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	218	20.0	4,360	6.35	687	0
Vendor Trucks	277	10.2	5,651	9.07	467	156
Worker Vehicles	881	18.5	32,597	28.43	287	860
Number of vehicles from CalEEMod analysis		Total Fuel Used for 18-Month Construction (gal)			1,440	1,016
	Assume vendor vehicles are:	75%	diesel	(good engineering judgement)		
	Assume worker vehicles are:	25%	diesel	(good engineering judgement)		

Table 4.6.B Total 18-Month Construction Fuel Usage Data

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
On-road Construction Vehicles	1,440	1,016
Off-road Construction Equipment	73,212	0
Total Fuel Used for 18-Month Construction (gal)	74,652	1,016
Average Annual Total Fuel Used (gal)	49,768	677
Percentage Increase Countywide	0.02%	0.0001%

Riverside County 2020 Total Gasoline Usage 915,500,000 gallons/year

Riverside County 2020 Total Diesel Usage 321,600,000 gallons/year

OFFROAD Output

Model Output: OFFROAD2021 (v1.0.3) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2024
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Y	Vehicle Category	Model Year	Horsepower Bin	Fuel	Fuel Consumption	Horsepower_Hours_hhpy
Riverside (SC)	2024	Construction and Mining - Cranes	Aggregate	300	Diesel	200609.5157	13470593.6
Riverside (SC)	2024	Construction and Mining - Excavators	Aggregate	50	Diesel	221143.5822	10062546.79
Riverside (SC)	2024	Construction and Mining - Graders	Aggregate	175	Diesel	366433.8416	17259616.38
Riverside (SC)	2024	Construction and Mining - Pavers	Aggregate	75	Diesel	7015.877211	328880.4143
Riverside (SC)	2024	Construction and Mining - Paving Equipment	Aggregate	100	Diesel	31796.31935	1730428.349
Riverside (SC)	2024	Construction and Mining - Rollers	Aggregate	50	Diesel	124366.4734	5765110.383
Riverside (SC)	2024	Construction and Mining - Rubber Tired Dozers	Aggregate	300	Diesel	29059.40117	1418920.027
Riverside (SC)	2024	Construction and Mining - Scrapers	Aggregate	600	Diesel	2760003.755	110389736.6
Riverside (SC)	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	100	Diesel	2975634.328	155516576
Riverside (SC)	2024	Industrial - Forklifts	Aggregate	75	Diesel	1248.358613	120849.9339
Riverside (SC)	2024	Light Commercial - Misc - Air Compressors	Aggregate	50	Diesel	27488.15	997209.2
Riverside (SC)	2024	Light Commercial - Misc - Generator Sets	Aggregate	50	Diesel	75759.4	1790248.35
Riverside (SC)	2024	Light Commercial - Misc - Welders	Aggregate	50	Diesel	126184.15	4888408.5

Fuel Consumption Worksheet

Annual VMT from CalEEMod modeling	Gasoline-Fueled Percentage	Diesel-Fueled Percentage	Average Gasoline mpg	Gasoline Consumption (gallons/yr)	Average Diesel mpg	Diesel Consumption (gallons/yr)
25,266,886	76.4%	23.6%	22.9	842,678	8	746,194

		Fleet Mix from CalEEMod modeling												
Land Use	ADT	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial	1,910	53.80%	4.00%	20.10%	0.00%	3.20%	0.90%	0.00%	15.70%	0.00%	0.00%	2.30%	0.00%	0.00%
		Vehicle Percentages by fuel type												
Gasoline-powered:		98%	95%	75%	50%	50%	10%	5%	5%	0%	0%	100%	10%	50%
Diesel-powered:		2%	5%	25%	50%	50%	90%	95%	95%	100%	100%	0%	90%	50%

truck % = 43.90%