Air Quality Assessment
Related Bristol Specific Plan Project
Santa Ana, California

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LIST OF ABBREVIATED TERMS

AQMP	air quality management plan
AB	Assembly Bill
ADT	average daily traffic
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAAQS	California Ambient Air Quality Standards
CCAA	California Clean Air Act
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CO	carbon monoxide
cy	cubic yards
DPM	diesel particulate matter
FCAA	Federal Clean Air Act
H_2S	hydrogen sulfide
Pb	lead
LST	local significance threshold
$\mu g/m^3$	micrograms per cubic meter
mg/m^3	milligrams per cubic meter
NAAQS	National Ambient Air Quality Standards
NO_2	nitrogen dioxide
NO_x	nitrogen oxide
O_3	ozone
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppm	parts per million
ROG	reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SRA	source receptor area
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Governments
sf	square foot, square feet
SO_{4-2}	sulfates
SO_2	sulfur dioxide
TAC	toxic air contaminant
U.S. EPA	United States Environmental Protection Agency
C_2H_3Cl	vinyl chloride
VOC	volatile organic compound

1 INTRODUCTION

This report documents the results of an Air Quality Assessment completed for the Related Bristol Specific Plan Project (Project). The purpose of this Air Quality Assessment is to evaluate the potential construction and operational emissions associated with the Project and determine the level of impact the Project would have on the environment.

This analysis has been undertaken to analyze whether the proposed Project would result in any new or substantially more severe significant environmental impacts as compared to the conclusions discussed in the certified final Santa Ana General Plan Update Program Environmental Impact Report (General Plan EIR) (State Clearinghouse No. 2020029087). The purpose of this analysis is to document whether any new air quality-related impacts would occur from the Project (described below) compared to the level of significance that was identified in the General Plan EIR pursuant to State California Environmental Quality Act (CEQA) Guidelines Section 15162 (et seq.).

1.1 Project Location

The project site is in the south portion of the City of Santa Ana (City). The approximately 41.13-gross-acre project site is bordered by MacArthur Boulevard to the north, Sunflower Avenue to the south, and Bristol Street to the east. The west side of the site is bordered by Plaza Drive between MacArthur Boulevard and Callen's Common and by existing development between Callen's Common and Sunflower Avenue to the west.

Vehicular access to the project site, which is currently developed as a predominately commercial shopping center, is provided from Bristol Street, Callen's Common, MacArthur Boulevard, Sunflower Avenue, and Plaza Drive.

Regional access to the project site is provided from Interstate 405 (I-405) from the onramp/offramp at Bristol Street approximately 0.5 mile to the south and from State Route 55 (SR-55) from the onramp/offramp at MacArthur Boulevard approximately 1.25 miles to the east. The site is approximately 1.5 miles northwest of John Wayne Airport; see **Exhibit 1: Regional Vicinity Map** and **Exhibit 2: Site Vicinity Map**.

1.2 Project Description

The Project would demolish the existing shopping center (approximately 465,063 square feet [sf]) and related infrastructure to allow for a mixed-use development. As shown in **Table 1: Land Use Summary**, the Project proposes 3,750 multi-family residential units; 350,000 sf of commercial uses; a 250-key hotel; a senior living/continuum of care use with 200 units; and approximately 13 acres of common open space. Parking would be provided by above- and below-ground parking structures providing shared parking; refer to **Exhibit 3: Conceptual Site Plan**.

The Project would be constructed in three phases. Construction of the Project may be progressively implemented in stages, provided that vehicular access, public facilities, and infrastructure are constructed to adequately serve the development. The project site would be graded and excavated in phases. The total export is expected to be approximately 1,340,325 cubic yards (cy) with an import of approximately 10,000 cy. Phase 1 export is approximately 640,550 cy and import is approximately 5,000 cy. Phase 2 export is approximately 214,906 cy and import is approximately 2,000 cy. Phase 3 export is approximately 484,869 cy and import is approximately 3,000 cy. It is anticipated that dewatering will be required due to high groundwater levels in the area. In addition to export and import associated with grading and

excavation, all of the existing buildings, pavement, and improvements will be demolished with each phase of construction and exported from the project site.

Table 1: Land Use Summary

Land Use	Proposed Development	Existing Development
Residential	3,750 du	0
Senior Living/Continuum of Care	200 units	0
Hotel	250 keys	0
Commercial	350,000 gsf	465,063 sf
Open Space (Common)	13.1 acres	0

du = dwelling unit; gsf = gross square feet; sf = square feet

The Project is anticipated to be implemented over a period of approximately nine years with demolition and construction activities anticipated to commence in the first quarter of 2026 and construction completed in the third quarter of 2036. Construction of Phase 1 is expected to commence in the first quarter of 2026 with completion in the first quarter of 2030 or approximately 42 months. Land uses in the Phase 2 and Phase 3 areas would be operational while Phase 1 is under construction. Phase 2 is expected to commence in the second quarter of 2030 with completion in the fourth quarter of 2032 or approximately 44 months. Phase 3 is expected to commence in the first quarter of 2033 with completion in the second quarter of 2036 or approximately 40 months.

The Phase 1 area is located south of Callen's Common and extends to Sunflower Avenue. Phase 2 and Phase 3 are located north of Callen's Common and extend to MacArthur Boulevard. The Phase 2 area is approximately one-third of the northern portion of the project site and is bordered by MacArthur Boulevard to the north, Callen's Common to the south, Bristol Street to the east, and Phase 3 of the proposed project to the west. The Phase 3 area is bordered by MacArthur Boulevard to the north, Callen's Common to the south, Phase 2 to the east, and Plaza Drive to the west.

Phase 1 includes the demolition of all on-site buildings and infrastructure on the southern portion of the project site bordered by Callen's Common to the north. Subsurface excavation would occur to allow for the construction of up to two levels of subterranean parking. Phase 1 assumes the construction of up to 1,375 multi-family residential units, 250,000 sf of retail uses, a 250-key hotel, a 200-unit senior living/continuum of care building, and a public open space area, as well as associated landscape improvements and infrastructure upgrades. All existing on-site development north of Callen's Common will remain operational during Phase 1.

Phase 2 includes the demolition of all on-site buildings and infrastructure within the Phase 2 area of the site. Subsurface excavation would occur to allow for the construction of one level of subterranean parking. No subterranean parking would be located under the Bristol Central Park. Phase 2 assumes the construction of 856 multi-family residential units, 65,000 sf of retail uses, public open space areas, as well as associated landscape improvements and infrastructure upgrades.

Phase 3 includes the demolition on-site buildings and infrastructure within the Phase 3 area of the site. Subsurface excavation would occur to allow for the construction of one level of subterranean parking. No subterranean parking would be located under the Bristol Central Park. Phase 3 assumes the construction of 1,519 multi-family residential units, 35,000 sf of retail uses, public open space areas, as well as associated landscape improvements and infrastructure upgrades; refer to **Table 2: Conceptual Phasing**.

Table 2: Conceptual Phasing

Use	Mixed-Use/ Village Core District	Mixed-Use/ Residential District		Total
	Phase 1	Phase 2	Phase 3	
Residential (units)	1,375	856	1,519	3,750
Commercial (gsf)	250,000	65,000	35,000	350,000
Hospitality (keys)	250	--	--	250
Senior/Continuum of Care (units)	200	--	--	200

gsf = gross square feet

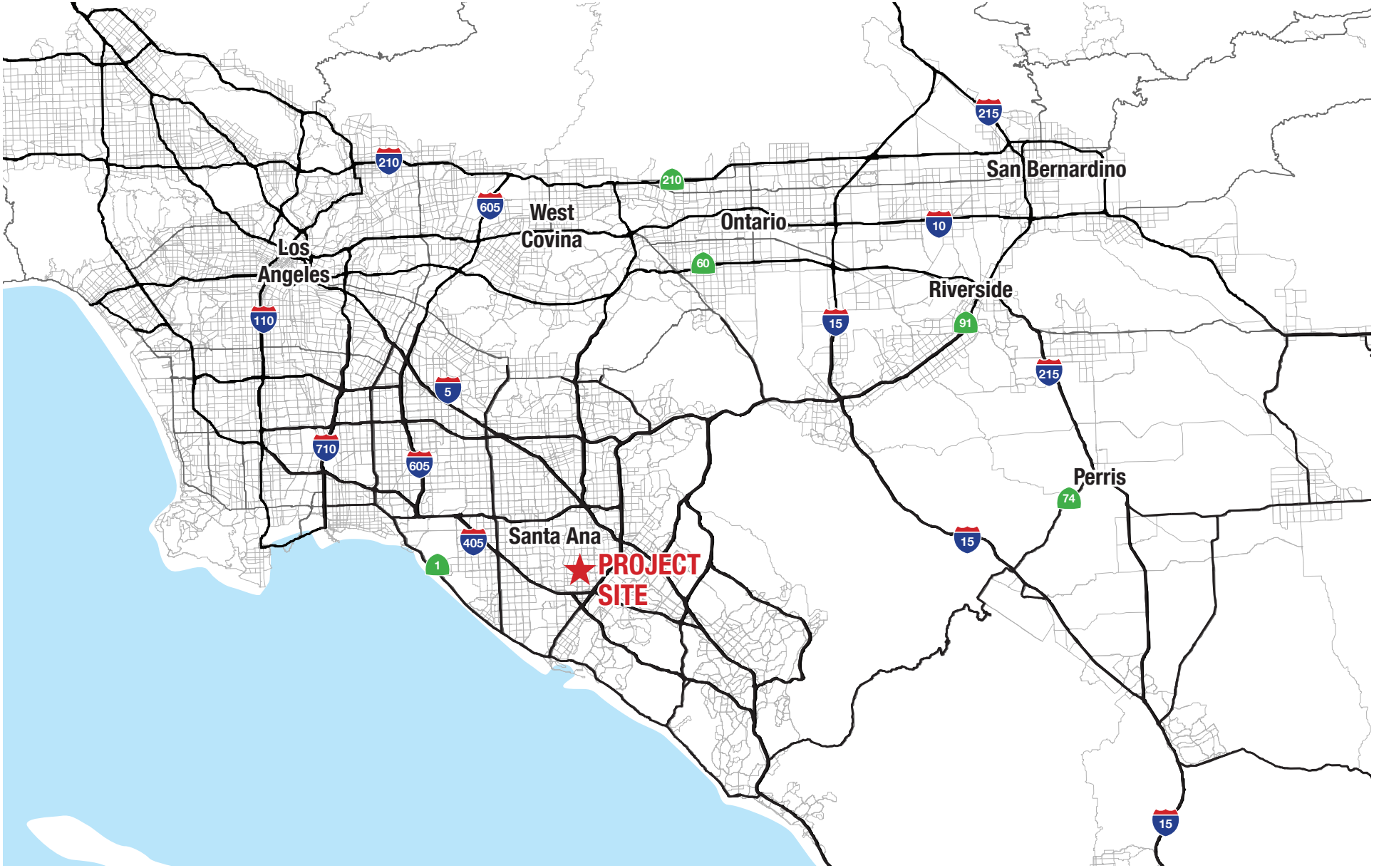

EXHIBIT 1: Regional Vicinity Map
Related Bristol
City of Santa Ana

Not to Scale

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EXHIBIT 2: Site Vicinity Map
Related Bristol
City of Santa Ana

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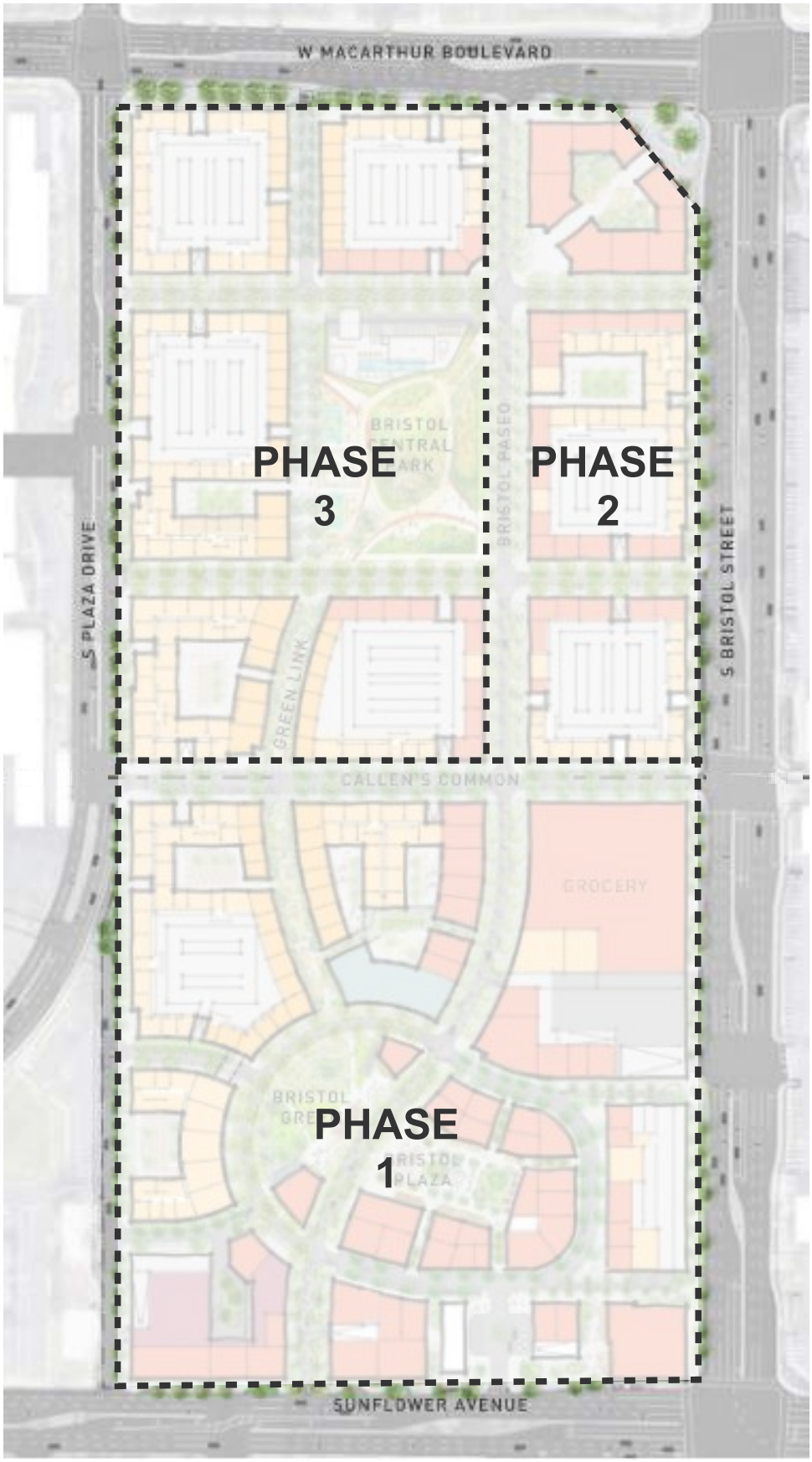

EXHIBIT 3: Conceptual Site Plan
Related Bristol
City of Santa Ana

Not to Scale

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2 ENVIRONMENTAL SETTING

2.1 Climate and Meteorology

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The Project is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, as well as all of Orange County. The SCAB is on a coastal plain with connecting broad valleys and low hills, bound by the Pacific Ocean on the southwest and high mountains forming the remainder of the perimeter[1]. Air quality in this area is determined by natural factors such as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below.

The SCAB is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. This usually mild weather pattern is occasionally interrupted by periods of extreme heat, winter storms, and Santa Ana winds. The annual average temperature throughout the 6,645-square-mile SCAB ranges from low 60 to high 80 degrees Fahrenheit with little variance. With more oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

Contrasting the steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rainfall occurs between the months of November and April. Summer rainfall is reduced to widely scattered thundershowers near the coast, with slightly heavier activity in the east and over the mountains.

Although the SCAB has a semiarid climate, the air closer to the Earth's surface is typically moist because of the presence of a shallow marine layer. Except for occasional periods when dry, continental air is brought into the SCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog are frequent and low clouds known as high fog are characteristic climatic features, especially along the coast. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SCAB.

Wind patterns across the SCAB are characterized by westerly or southwesterly on-shore winds during the day and easterly or northeasterly breezes at night. Wind speed is typically higher during the dry summer months than during the rainy winter. Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During winter and fall, surface high-pressure systems over the SCAB, combined with other meteorological conditions, result in very strong, downslope Santa Ana winds. These winds normally continue for a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

In addition to the characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which air pollutants are mixed. These inversions are the marine inversion and the radiation inversion. The height of the base of the inversion at any given time is called the "mixing height." The combination of winds and

[1] South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993.

inversions is a critical determinant leading to highly degraded air quality for the SCAB in the summer and generally good air quality in the winter.

2.2 Air Pollutants of Concern

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by State and federal laws. These regulated air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants.

Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_X), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead are primary air pollutants. Of these, CO, NO_X, SO_2, PM_{10}, and $PM_{2.5}$ are primary criteria pollutants. ROG and NO_X are criteria pollutant precursors and form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O_3) is formed by a chemical reaction between ROG and NO_X in the presence of sunlight. O_3 and nitrogen dioxide (NO_2) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in **Table 3: Air Contaminants and Associated Public Health Concerns**.

Table 3: Air Contaminants and Associated Public Health Concerns

Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM_{10} and $PM_{2.5}$)	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O_3)	Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC)[1] and nitrogen oxides (NO_X) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Sulfur Dioxide (SO_2)	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to O_3. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead (Pb)	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood,

Table 3: Air Contaminants and Associated Public Health Concerns		
Pollutant	**Major Man-Made Sources**	**Human Health Effects**
	emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.	bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.
[1] Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROGs and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).		
Source: California Air Pollution Control Officers Association (CAPCOA), *Health Effects*, http://www.capcoa.org/health-effects/, Accessed December, 2022.		

Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (i.e. chronic, carcinogenic or cancer causing) adverse human health effects (i.e. injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines.

CARB identified diesel particulate matter (DPM) as a toxic air contaminant. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Ambient Air Quality

CARB monitors ambient air quality at approximately 250 air monitoring stations across the State. These stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Existing levels of ambient air quality levels, historical trends, and projections near the Project are documented by measurements made by the South Coast Air Quality Management District (SCAQMD), the air pollution regulatory agency in the SCAB that maintains air quality monitoring stations which process ambient air quality measurements.

Pollutants of concern in the SCAB include O_3, PM_{10}, and $PM_{2.5}$. The closest air monitoring station to the Project that monitors ambient concentrations of these pollutants is the Anaheim-Pampas Lane Monitoring Station (located approximately 9.7 miles to the north). Local air quality data from 2019 to

2021 are provided in **Table 4: Ambient Air Quality Data**, which lists the monitored maximum concentrations and number of exceedances of State or federal air quality standards for each year.

Table 4: Ambient Air Quality Data

Criteria Pollutant	2019	2020	2021
Ozone (O_3) [1]			
1-hour Maximum Concentration (ppm)	0.096	0.142	0.089
8-hour Maximum Concentration (ppm)	0.082	0.097	0.068
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.09 ppm)	1	6	0
NAAQS 8-hour (>0.070 ppm)	1	15	0
Carbon Monoxide (CO)			
1-hour Maximum Concentration (ppm)	2.635	1.316	2.288
Number of Days Standard Exceeded			
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO_2) [1]			
1-hour Maximum Concentration (ppm)	0.0594	0.0709	0.0671
Number of Days Standard Exceeded			
NAAQS 1-hour (>0.100 ppm)	0	0	0
CAAQS 1-hour (>0.18 ppm)	0	0	0
Particulate Matter Less Than 10 Microns (PM_{10}) [1]			
National 24-hour Maximum Concentration	127.6	74.8	63.6
State 24-hour Maximum Concentration	127.1	74.5	63.3
State Annual Average Concentration (CAAQS=20 µg/m^3)	—	—	—
Number of Days Standard Exceeded			
NAAQS 24-hour (>150 µg/m^3)	0	0	0
CAAQS 24-hour (>50 µg/m^3)	4	5	1
Particulate Matter Less Than 2.5 Microns ($PM_{2.5}$) [1]			
National 24-hour Maximum Concentration	36.1	60.2	54.4
State 24-hour Maximum Concentration	37.1	64.8	54.4
Number of Days Standard Exceeded			
NAAQS 24-hour (>35 µg/m^3)	4	12	10

NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million.
µg/m^3 = micrograms per cubic meter; – = not measured
[1] Measurements taken at the Anaheim-Pampas Lane Monitoring Station at 1630 Pampas Lane, Anaheim, California 92220 (CARB# 30178)

Source: All pollutant measurements are from the CARB Aerometric Data Analysis and Management system database (https://www.arb.ca.gov/adam) except for CO, which were retrieved from the CARB Air Quality and Meteorological Information System (https://www.arb.ca.gov/aqmis2/aqdselect.php).

2.3 Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than is the general population. Sensitive receptors that are in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The project site is mainly surrounded by commercial land uses to the north, southwest, south, and southeast and residential to the northwest, west, and east. The City of Santa Ana Bomo Koral Park is located to the east. Sensitive land uses nearest to the project site are shown in **Table 5: Sensitive Receptors** and **Exhibit 4: Sensitive Receptor Locations**.

Table 5: Sensitive Receptors

Receptor Description	Distance and Direction from the Project Site
Multi-family Residences	130 feet to the west
Multi-family Residences	292 feet to the northwest
Multi-family Residences	460 feet to the east
Bomo Koral Park	1,580 feet to the east

Source: Google Earth

EXHIBIT 4: Sensitive Receptor Locations
Related Bristol
City of Santa Ana

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3 REGULATORY SETTING

3.1 Federal

Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the United States Environmental Protection Agency (U.S. EPA) developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and lead. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires each state to prepare a State Implementation Plan to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. EPA can withhold certain transportation funds from states that fail to comply with the planning requirements of the FCAA. If a state fails to correct these planning deficiencies within two years of federal notification, the U.S. EPA is required to develop a federal implementation plan for the identified nonattainment area or areas. The provisions of 40 Code of Federal Regulations Parts 51 and 93 apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan. Applicable NAAQS standards are summarized in **Table 6: State and Federal Ambient Air Quality Standards**.

3.2 State of California

California Air Resources Board

CARB administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in **Table 6**, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates.

The California Clean Air Act (CCAA) requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the State Implementation Plan for meeting federal clean air standards for the State of California. Like the U.S. EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a State standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a State standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in **Table 6**.

Table 6: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards[1]	National Standards[2]
Ozone (O_3) [2, 5, 7]	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm
	1 Hour	0.09 ppm (180 µg/m^3)	NA
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	0.10 ppm[11]
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)
Sulfur Dioxide (SO_2) [8]	24 Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)
	1 Hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)
	Annual Arithmetic Mean	NA	0.03 ppm (80 µg/m^3)
Particulate Matter (PM_{10}) [1, 3, 6]	24-Hour	50 µg/m^3	150 µg/m^3
	Annual Arithmetic Mean	20 µg/m^3	NA
Fine Particulate Matter ($PM_{2.5}$) [3, 4, 6, 9]	24-Hour	NA	35 µg/m^3
	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3
Sulfates (SO_{4-2})	24 Hour	25 µg/m^3	NA
Lead (Pb) [10, 11]	30-Day Average	1.5 µg/m^3	NA
	Calendar Quarter	NA	1.5 µg/m^3
	Rolling 3-Month Average	NA	0.15 µg/m^3
Hydrogen Sulfide (H_2S)	1 Hour	0.03 ppm (42 µg/m^3)	NA
Vinyl Chloride (C_2H_3Cl) [10]	24 Hour	0.01 ppm (26 µg/m^3)	NA

Notes:

ppm = parts per million; µg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; – = no information available.

1 California standards for O_3, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM_{10}, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e. all standards except for lead and the PM_{10} annual standard), then some measurements may be excluded. Measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe carbon monoxide standard is 6.0 ppm, a level one-half the national standard and two-thirds the State standard.

2 National standards shown are the "primary standards" designed to protect public health. National standards other than for O_3, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour O_3 standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour O_3 standard is attained when the 3-year average of the 4th highest daily concentrations is 0.070 ppm or less. The 24-hour PM_{10} standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m$_3$. The 24-hour $PM_{2.5}$ standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m^3.

3 Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the 3-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard. NAAQS are set by the U.S. EPA at levels determined to be protective of public health with an adequate margin of safety.

4 On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour O_3 concentration per year, averaged over three years, is equal to or less than 0.070 ppm. U.S. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the O_3 level in the area.

5 The national 1-hour O_3 standard was revoked by the U.S. EPA on June 15, 2005.

6 In June 2002, CARB established new annual standards for $PM_{2.5}$ and PM_{10}.

7 The 8-hour California O_3 standard was approved by the CARB on April 28, 2005 and became effective on May 17, 2006.

8 On June 2, 2010, the U.S. EPA established a new 1-hour SO_2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO_2 NAAQS however must continue to be used until one year following U.S. EPA initial designations of the new 1-hour SO_2 NAAQS.

9 In December 2012, U.S. EPA strengthened the annual $PM_{2.5}$ NAAQS from 15.0 to 12.0 µg/m^3. In December 2014, the U.S. EPA issued final area designations for the 2012 primary annual $PM_{2.5}$ NAAQS. Areas designated "unclassifiable/attainment" must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.

10 CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure below which there are no adverse health effects determined.

11 National lead standards, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.

Source: South Coast Air Quality Management District, *Air Quality Management Plan*, 2016; California Air Resources Board, *Ambient Air Quality Standards*, May 6, 2016.

3.3 Regional

South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. The agency's primary responsibility is ensuring that the CAAQS and NAAQS are attained and maintained in the SCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The SCAQMD is also the lead agency in charge of developing the AQMP, with input from the Southern California Association of Governments (SCAG) and CARB. The AQMP is a comprehensive plan that includes control strategies for stationary and area sources, as well as for on-road and off-road mobile sources. SCAG has the primary responsibility for providing future growth projections and the development and implementation of transportation control measures. CARB, in coordination with federal agencies, provides the control element for mobile sources.

The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017. The purpose of the 2016 AQMP is to set forth a comprehensive and integrated program that would lead the SCAB into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update to the SCAQMD's commitments towards meeting the federal 8-hour O_3 NAAQS. Specifically, the 2016 AQMP covers the following federal standards: 1979 1-hour O_3 NAAQS, 1997 8-hour O_3 NAAQS, 2006 24-hour $PM_{2.5}$ NAAQS, 2008 8-hour O_3 NAAQS, and the 2012 annual $PM_{2.5}$ NAAQS.

On October 1, 2015, the U.S. EPA strengthened the NAAQS for ground-level O_3. The 2022 AQMP, adopted by the SCAQMD Governing Board on December 2, 2022, was developed to address the requirements for meeting the 2015 8-hour O_3 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 FCAA measures to achieve the 2015 8-hour ozone standard. The 2022 AQMP incorporates the latest scientific and technological information and planning assumptions, including the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) and updated emission inventory methodologies for various source categories. The 2022 AQMP requires CARB's adoption before submittal for the U.S. U.S. EPA's final approval, which is expected to occur sometime in 2023.

The SCAQMD has published the *CEQA Air Quality Handbook* (approved by the SCAQMD Governing Board in 1993 and augmented with guidance for Local Significance Thresholds [LSTs] in 2008). The SCAQMD guidance helps local government agencies and consultants to develop environmental documents required by CEQA and provides identification of suggested thresholds of significance for criteria pollutants for both construction and operation (see discussion of thresholds below). With the help of the *CEQA Air Quality Handbook* and associated guidance, local land use planners and consultants are able to analyze and document how proposed and existing projects affect air quality in order to meet the requirements of the CEQA review process. The SCAQMD periodically provides supplemental guidance and updates to the handbook on their website.

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. Under federal law, SCAG is designated as a Metropolitan Planning Organization and under State law as a Regional Transportation Planning Agency and a Council of Governments.

The State and federal attainment status designations for the SCAB are summarized in **Table 7: South Coast Air Basin Attainment Status**. The SCAB is currently designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$ CAAQS, as well as the 8-hour O_3 and $PM_{2.5}$ NAAQS. The SCAB is designated as attainment or unclassified for the remaining CAAQS and NAAQS.

Table 7: South Coast Air Basin Attainment Status

Pollutant	State	Federal
Ozone (O_3) (1 Hour Standard)	Non-Attainment	Non-Attainment (Extreme)
Ozone (O_3) (8 Hour Standard)	Non-Attainment	Non-Attainment (Extreme)
Particulate Matter ($PM_{2.5}$) (24 Hour Standard)	–	Non-Attainment (Serious)
Particulate Matter ($PM_{2.5}$) (Annual Standard)	Non-Attainment	Non-Attainment (Moderate)
Particulate Matter (PM_{10}) (24 Hour Standard)	Non-Attainment	Attainment (Maintenance)
Particulate Matter (PM_{10}) (Annual Standard)	Non-Attainment	–
Carbon Monoxide (CO) (1 Hour Standard)	Attainment	Attainment (Maintenance)
Carbon Monoxide (CO) (8 Hour Standard)	Attainment	Attainment (Maintenance)
Nitrogen Dioxide (NO_2) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide (NO_2) (Annual Standard)	Attainment	Attainment (Maintenance)
Sulfur Dioxide (SO_2) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Sulfur Dioxide (SO_2) (24 Hour Standard)	Attainment	–
Lead (Pb) (30 Day Standard)	–	Unclassifiable/Attainment
Lead (Pb) (3 Month Standard)	Attainment	–
Sulfates (SO_{4-2}) (24 Hour Standard)	Attainment	–
Hydrogen Sulfide (H_2S) (1 Hour Standard)	Unclassified	–

Source: South Coast Air Quality Management District, *Air Quality Management Plan*, 2022; United States Environmental Protection Agency, *Nonattainment Areas for Criteria Pollutants (Green Book)*, 2022.

The following is a list of SCAQMD rules that are required of construction activities associated with the Project:

- **Rule 402 (Nuisance)** – This rule prohibits the 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. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

    a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.

    b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

    c) All material transported off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

    d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.

    e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

- **Rule 445 (Wood Burning)** –This rule prohibits permanently installed wood-burning devices into any new development. A wood-burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

- **Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities)** – This rule requires owners and operators or any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.

3.4 Local

City of Santa Ana General Plan

The City of Santa Ana General Plan is based on a vision statement and five core values established as part of an extensive community outreach effort. The following are relevant policies of the Santa Ana General Plan Update, which may reduce air quality impacts.

Mobility Element

Policy 1.7 Proactive Mitigation. Proactively mitigate potential air quality, noise, congestion, safety, and other impacts from the transportation network on residents and business.

Policy 1.8 Environmental Sustainability. Consider air and water quality, noise reduction, neighborhood character, and street-level aesthetics when making improvements to travelways.

Policy 3.3 Safe Routes to Schools and Parks. Lead the development and implementation of safer routes to schools and parks by partnering with the school district, residents, property owners, and community stakeholders.

Policy 3.4 Regional Coordination. Coordinate development of the City's active transportation and transit network with adjacent jurisdictions, OCTA, and other appropriate agencies.

Policy 3.5 Education and Encouragement. Encourage active transportation choices through education, special events, and programs.

Policy 3.7 Complete Streets Design. Enhance streets to facilitate safe walking, bicycling, and other nonmotorized forms of transportation through community participatory design.

Policy 4.1 Intense Development Areas. Program multimodal transportation and public realm improvements that support new development in areas along transit corridors and areas planned for high intensity development.

Policy 4.2 Project Review. Encourage active transportation, transit use, and connectivity through physical improvements and public realm amenities identified during the City's Development Review process.

Policy 4.3 Transportation Management. Coordinate with OCTA, employers, and developers to utilize TDM (transportation demand management) strategies and education to reduce vehicle trips and parking demands

Policy 4.5 Land Use Development Design. Ensure that building placement and design features create a desirable and active streetscape.

Policy 4.6 Roadway Capacity Alternatives. Promote reductions in automobile trips and vehicle miles traveled by encouraging transit use and nonmotorized transportation as alternatives to augmenting roadway capacity.

Policy 4.7 Parking. Explore and implement a flexible menu of parking options and other strategies to efficiently coordinate the response to parking demands.

Policy 4.9 Air Pollution Mitigation. Consider land use, building, site planning, and technology solutions to mitigate exposure to transportation related air pollution.

Policy 5.4 Green Streets. Leverage opportunities along streets and public rights-of-way to improve water quality through use of landscaping, permeable pavement, and other best management practices.

Policy 5.6 Clean Fuels and Vehicles. Encourage the use of alternative fuel vehicles and mobility technologies through the installation of supporting infrastructure.

Community Element

Policy 3.2 Healthy Neighborhoods. Continue to support the creation of healthy neighborhoods by addressing public safety, land use conflicts, hazardous soil contamination, incompatible uses, and maintaining building code standards.

Policy 3.4 Safe Mobility. Promote the overall safety of multi-modal streets by developing local and regional programs that educate and inform motorists of non-motorized roadway users.

Policy 3.7 Active Lifestyles. Support programs that promote sports, fitness, walking, biking and active lifestyles.

Conservation Element

Policy 1.1 Regional Planning Efforts. Coordinate air quality planning efforts with local and regional agencies to meet State and Federal ambient air quality standards in order to protect all residents from the health effects of air pollution.

Policy 1.3 Education. Promote efforts to educate businesses and the general public about air quality standards, reducing the urban heat island effect, health effects from poor air quality and extreme heat, and best practices they can make to improve air quality and reduce greenhouse gas emissions.

Policy 1.4 Development Standards. Support new development that meets or exceeds standards for energy-efficient building design and site planning.

Policy 1.5 Sensitive Receptor Decisions. Consider potential impacts of stationary and non-stationary emission sources on existing and proposed sensitive uses and opportunities to minimize health and safety risks. Develop and adopt new regulations on the siting of facilities that might significantly increase pollution near sensitive receptors within environmental justice area boundaries.

Policy 1.6 New and Infill Residential Development. Promote development that is mixed-use, pedestrian-friendly, transit oriented, and clustered around activity centers.

Policy 1.7 Housing and Employment Opportunities. Improve the City's jobs/housing balance ratio by supporting development that provides housing and employment opportunities to enable people to live and work in Santa Ana.

Policy 1.8 Promote Alternative Transportation. Promote use of alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs and emerging technologies.

Policy 1.9 Public Investment Alternative Transportation Infrastructure. Continue to invest in infrastructure projects that support public transportation and alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs, and emerging technologies.

Policy 1.10 Transportation Management. Continue to support and invest in improvements to the City's Transportation Management System, including projects or programs that improve traffic flow and reduce traffic congestion.

Policy 1.11 Public Investment in Low- or Zero Emission Vehicles. Continue to invest in low-emission or zero-emission vehicles to replace the City's gasoline powered vehicle fleet and to transition to available clean fuel sources such as bio-diesel for trucks and heavy equipment.

Policy 1.12 Sustainable Infrastructure. Encourage the use of low or zero emission vehicles, bicycles, non-motorized vehicles, and car-sharing programs by supporting new and existing development that includes sustainable infrastructure and strategies such as vehicle charging stations, drop-off areas for ridesharing services, secure bicycle parking, and transportation demand management programs.

Policy 1.13 City Contract Practices. Support businesses and contractors that use reduced-emissions equipment for city construction projects and contracts for services, as well as businesses that practice sustainable operations.

Policy 1.14 Transportation Demand Management. Require and incentivize projects to incorporate Transportation Demand Management (TDM) techniques.

Policy 2.3 Resource Management. Efficiently manage soil and mineral resource operations to eliminate significant nuisances, hazards, or adverse environmental effects on neighboring land uses.

Policy 3.3 Development Patterns. Promote energy efficient-development patterns by clustering mixed use developments and compatible uses adjacent to public transportation.

Policy 3.11 Energy-Efficient Transportation Infrastructure. Continue to support public and private infrastructure for public transportation such as bus routes, rail lines, and the OC Streetcar.

Land Use Element

Policy 1.5 Diverse Housing Types. Incentivize quality infill residential development that provides a diversity of housing types and accommodates all income levels and age groups.

Policy 1.6 Transit Oriented Development. Encourage residential mixed-use development, within the City's District Centers and Urban Neighborhoods, and adjacent to high quality transit.

Policy 1.7 Active Transportation Infrastructure. Invest in active transportation connectivity between activity centers and residential neighborhoods to encourage healthy lifestyles.

Policy 2.5 Benefits of Mixed Use. Encourage infill mixed-use development at all ranges of affordability to reduce vehicle miles travelled, improve jobs/housing balance, and promote social interaction.

Policy 2.10 Smart Growth. Focus high density residential in mixed-use villages, designated planning focus areas, Downtown Santa Ana, and along major travel corridors.

Policy 3.8 Sensitive Receptors. Avoid the development of industry and sensitive receptors in close proximity to each other that could pose a hazard to human health and safety, due to the quantity, concentration, or physical or chemical characteristics of the hazardous materials utilized, or the hazardous waste an operation may generate or emit.

Policy 3.9 Noxious, Hazardous, Dangerous, and Polluting Uses. Improve the health of residents, students, and workers by limiting the impacts of construction activities and operation of noxious, hazardous, dangerous, and polluting uses that are in close proximity to sensitive receptors, with priority given to discontinuing such uses within environmental justice areas boundaries.

Policy 3.11 Air Pollution Buffers. Promote landscaping and other buffers to separate existing sensitive uses from rail lines, heavy industrial facilities, and other emissions sources. As feasible, apply more substantial buffers within environmental justice area boundaries.

Policy 3.12 Indoor Air Quality. Require new sensitive land uses proposed in areas with high levels of localized air pollution to achieve good indoor air quality through landscaping, ventilation systems, or other measures.

Policy 4.1 Complementary Uses. Promote complete neighborhoods by encouraging a mix of complementary uses, community services, and people places within a walkable area.

Policy 4.3 Sustainable Land Use Strategies. Encourage land uses and strategies that reduce energy and water consumption, waste and noise generation, soil contamination, air quality impacts, and light pollution.

Policy 4.5 VMT Reduction. Concentrate development along high-quality transit corridors to reduce vehicle miles traveled (VMT) and transportation related carbon emissions.

Safety Element

Policy 2.1 Regional Collaboration. Consult and collaborate with federal, state, and regional agencies to identify and regulate the disposal and storage of hazardous materials, prevent the illegal transportation and disposal of hazardous waste, and facilitate the cleanup of contaminated sites.

Policy 2.2 Hazardous Waste Generators. Collaborate with appropriate agencies to identify and inventory all users and handlers of hazardous materials to proactively mitigate potential impacts.

Policy 2.3 Transportation and Storage. Coordinate with the County of Orange, the California Department of Transportation, and other relevant parties to enforce state and local laws regulating the storage and transport of hazardous materials within the City of Santa Ana, and limit truck routes through the City to arterials streets away from natural habitats and sensitive land uses.

Policy 2.4 Planning and Remediation. Determine the presence of hazardous materials and/or waste contamination prior to approval of new uses and require that appropriate measures be taken to protect the health and safety of site users and the community.

Policy 2.6 Existing Sensitive Uses. Partner and collaborate with property owners, businesses, and community groups to develop strategies to protect and minimize risks from existing hazardous material sites to existing nearby sensitive uses with priority given to discontinuing such uses within environmental justice area boundaries. Urban Design Element

Policy 1.6 Active Transportation Infrastructure. Support the creation of citywide public street and site amenities that accommodate and promote an active transportation-friendly environment.

Policy 3.10 Coordinated Street Improvement Plans. Coordinate citywide landscape medians and street trees with land use plans and development projects.

Policy 5.4 Intersections for all Travel Modes. Strengthen active transportation connections and amenities at focal intersections to promote a pleasant and safe experience for non-motorized forms of travel.

Open Space Element

Policy 2.5 Air Quality and Heat. Coordinate park renovation and development to address air quality and climate impacts by reducing heat island effect by providing green infrastructure and shade, and reducing air pollution by providing vegetation that removes pollutants and air particles.

Policy 3.5 Landscaping. Encourage the planting of native and diverse tree species in public and private spaces to reduce heat island effect, reduce energy consumption, and contribute to carbon mitigation.

Policy 3.6 Sustainable Parks and Facilities. Integrate drought tolerant or native plantings, water-wise irrigation, design and maintenance efficiencies, and sustainable development practices to reduce water use and energy consumption.

Policy 3.7. Urban Forest. Maintain, preserve, and enhance the City's urban forest as an environmental, economic, and aesthetic resource to improve residents' quality of life.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Air Quality Thresholds

Based upon the criteria derived from State CEQA Guidelines Appendix G, a Project normally would have a significant effect on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable State or federal ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.
- Exceed SCAQMD Thresholds

SCAQMD Thresholds

The significance criteria established by SCAQMD may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if a project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality during construction and operational activities of land use development projects, as shown in **Table 8: South Coast Air Quality Management District Emissions Thresholds**.

Table 8: South Coast Air Quality Management District Emissions Thresholds

Criteria Air Pollutants and Precursors	Maximum Pounds Per Day	
	Construction-Related	Operational-Related
Reactive Organic Gases (ROG)	75	55
Carbon Monoxide (CO)	550	550
Nitrogen Oxides (NO_X)	100	55
Sulfur Oxides (SO_X)	150	150
Coarse Particulates (PM_{10})	150	150
Fine Particulates ($PM_{2.5}$)	55	55

Source: South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Thresholds*.

Localized Carbon Monoxide

In addition to the daily thresholds listed above, the Project would also be subject to the CAAQS and NAAQS. These are addressed though an analysis of localized CO impacts. The significance of localized impacts depends on whether ambient CO levels near the project site are above the CAAQS and NAAQS (the more stringent California CO CAAQS are 20 ppm for 1-hour and 9 ppm for 8-hour). The SCAB has been designated as attainment under the 1-hour and 8-hour CAAQS.

Localized Significance Thresholds (LSTs)

In addition to the CO hotspot analysis, the SCAQMD developed LSTs for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (off-site mobile source emissions are not included in the LST analysis). LSTs represent the maximum emissions that can be generated by a project without expecting to cause or substantially contribute to an exceedance of the most stringent CAAQS or NAAQS. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb 5 acres or less on a single day. The City of Santa Ana is located within SCAQMD SRA 17. **Table 9: Local Significance Thresholds for Construction/Operations** shows the LSTs for a 1-acre, 2-acre, 4-acre (interpolated), and 5-acre project in SRA 17. Because the nearest sensitive receptors are 130 feet (40 meters) to the west of the project site, the thresholds for distances of 40 meters or less are listed below. LSTs at 40 meters for all acreage categories are provided in **Table 9** for informational purposes. **Table 9** shows that the LSTs increase as acreages increase.

Table 9: Local Significance Thresholds for Construction/Operations

Project Size	Maximum Pounds Per Day[1]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
1 Acre	82.20/82.20	645.80/645.80	8.80/2.20	3.60/1.00
2 Acres	114.40/114.40	910.60/910.60	13.80/3.80	5.20/1.60
4 Acres	153.73/153.73	1,331.27/1,331.27	23.67/6.07	7.20/2.27
5 Acres	173.40/173.40	1,541.60/1,541.60	28.60/7.20	8.20/2.43

NO_X = Nitrogen Oxides; CO = Carbon Monoxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Thresholds interpolated based on a distance of 40 meters.

Source: South Coast Air Quality Management District, *Localized Significance Threshold Methodology,* July 2008.

It should be noted that LSTs are screening thresholds and are therefore conservative. The construction LST acreage is determined based the expected daily acreage disturbed. The operational LST acreage is based on the total area of the project site. Although the project site is greater than five acres, the 5-acre operational LSTs are conservatively used to evaluate the Project.

4.2 Methodology

This air quality impact analysis considers the Project's construction and operational impacts. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model 2022 (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Air quality impacts were assessed according to methodologies recommended by CARB and the SCAQMD.

Construction

Project-related construction equipment, trucks, worker vehicles, and ground-disturbing activities would generate emissions of criteria air pollutants and precursors. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod.

The Project would be constructed and is modeled in three different phases[2]:

- **Phase 1:** from 2026 to 2030, with approximately 640,550 cubic yards of soil export and approximately 5,000 cubic yards of import
- **Phase 2:** from 2030 to 2032, with approximately 214,906 cubic yards of soil export and approximately 2,000 cubic yards of import
- **Phase 3:** from 2033 to 2036, with approximately 484,869 cubic yards of soil export and approximately 3,000 cubic yards of import

The total export is expected to be approximately 1,340,325 cubic yards with an import of approximately 10,000 cubic yards. Off-site improvements would be required in the roadways adjacent to the project site and are assumed to occur during Phase 1 construction. The off-site improvements include the installation and upgrade of water, stormwater, and sewer utilities, as well as roadway improvements that include intersection improvements and median reconstruction. Off-site construction emissions were quantified with the Roadway Construction Emissions Model (RCEM) (version 9.0) prepared by the Sacramento Metropolitan Air Quality Management District.

Operations

Project operations would result in emissions of area sources (consumer products, architectural coating, and landscape equipment), energy sources (natural gas usage), and mobile sources (motor vehicles from Project generated vehicle trips). Emissions from each of these categories are discussed below.

- **Area Sources.** Area source emissions would be generated due to consumer products, on-site equipment, architectural coating, and landscaping that were previously not present on the site. Consumer products are various solvents used in non-industrial applications, which emit VOCs during product use. These typically include cleaning supplies, kitchen aerosols, cosmetics, and toiletries. It should be noted that the default area source VOC emission factor developed for CalEEMod is based on a statewide factor. The CalEEMod default emissions rates were used.
- **Energy Sources.** Energy source emissions would be generated due to electricity and natural gas usage associated with the Project. Primary uses of electricity and natural gas by the Project would be from space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. Energy source emissions were calculated in CalEEMod. No changes were made to the default energy usage consumption rates or emissions factors.
- **Mobile Sources.** Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern. NO_X and ROG react with sunlight to form O_3, known as

[2] A conservative worst-case construction timeline has been modeled for analysis purposes. This involves modeling emissions at the earliest feasible date. Emissions in future years (i.e., due to a later construction start date or operational opening year) would be lower due to phased-in emissions standards, inspection and maintenance requirements, and fleet turnover). Project construction that occurs at a later date than what was modeled impacts would result in lower emissions than those analyzed due to the use of more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to State regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment. As a result, Project-related construction emissions that occur in a later timeframe would be lower than the impacts disclosed herein. For emissions modeling purposes, conservatively analyzing the emissions using the earliest feasible construction start date to provide for a worst-case analysis and full disclosure of potential air quality impacts, as required by CEQA.

photochemical smog. Additionally, wind currents readily transport PM_{10} and $PM_{2.5}$. However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions are based on the trip generation within the Project's Traffic Circulation Analysis Memorandum and incorporated into CalEEMod as recommended by the SCAQMD. The Project's generated traffic was obtained from the Project's Traffic Circulation Analysis Memorandum for The Related Bristol prepared by Linscott Law & Greenspan Engineers (August 2022). Project trip generation from the traffic study is based on the following Institute of Transportation Engineers (ITE) land use categories:

Phase 1

- ITE Land Use 221: Multi-family Housing (Mid-rise) (1,375 dwelling units, 6,243 total daily vehicle trips).
- ITE Land Use 310: Hotel (250 rooms, 1,998 total daily vehicle trips).
- ITE Land Use 820: Shopping Center (250 thousand square feet, 9,253 total daily vehicle trips).
- ITE Land Use 255: Retirement Community (200 beds, 494 total daily vehicle trips).

Phase 2

- ITE Land Use 221: Multi-family Housing (Mid-rise) (856 dwelling units, 3,886 total daily vehicle trips)
- ITE Land Use 820: Shopping Center (65 thousand square feet, 2,406 total daily vehicle trips).

Phase 3

- ITE Land Use 221: Multi-family Housing (Mid-rise) (1,519 dwelling units, 6,896 total daily vehicle trips).
- ITE Land Use 820: Shopping Center (35 thousand square feet, 1,295 total daily vehicle trips).

According to the Project Traffic Scope of Work, the existing uses on the project site generate approximately 15,490 daily trips. The total proposed Project trip generation would be 22,818 daily trips, and the net trip generation would be 7,328 net new daily trips (with the incorporation of internal capture and pass-by reductions). Mobile source emission rates in CalEEMod used the CARB SAFE Rule adjustment factors.[3]

As discussed above, the SCAQMD provides significance thresholds for emissions associated with proposed Project construction and operations. The proposed Project's construction and operational emissions are compared to the daily criteria pollutant emissions significance thresholds in order to determine the significance of a Project's impact on regional air quality.

The mitigated output from CalEEMod show reductions from existing regulatory requirements and project design features that are termed "mitigation" within the model; however, those modeling components associated with locational measures and compliance with existing regulations are not considered mitigation under CEQA, but rather are treated as project design features. The Project would incorporate

[3] The U.S. EPA repealed SAFE Rule Part 1 on January 28, 2022. Therefore, the mobile source emissions in this analysis are conservative.

design features and would obtain benefits from its location that would reduce project-related vehicle miles traveled compared to default values. The reductions attributable to these features in CalEEMod are derived from methodologies compiled in the CAPCOA report Quantifying GHG Mitigation Measures[4]. Each feature was assessed to determine its consistency with CAPCOA criteria and are applied to the Project in CalEEMod. The features incorporated into the CalEEMod modeling and mitigation component include:

- **Land Use and Transportation (LUT)-1 Increase Density**: The emissions modeling for the Project include up to 3,750 dwelling units throughout the 41.1-acre project site. This feature also provides a foundation for implementation of many other features which would benefit from increased densities. For example, transit ridership increases with density, which justifies enhanced transit service.
- **LUT-3 Increase Diversity of Land Uses**: The measure requires at least three different land uses within 0.25 mile. There are single-family residential, multi-family residential, retail, and office land uses within this distance from the project site. The proposed Project is a mixed-use infill project with residential uses, senior living community, retail uses, and a hotel.
- **Street Design (SDT)-1 Improve Pedestrian Access**: This measure provides pedestrian access linking the project site to other areas to encourage walking. The measure requires both on-site and off-site pedestrian infrastructure. The Project includes active transportation features that would meet the criteria of this measure. The Project would develop interconnected pedestrian walkways that provide direct/convenient access between the commercial, residential, and hotel uses and to the surrounding street fronting sidewalks.

Localized Significance Thresholds

The localized effects from the Project's on-site emissions were evaluated in accordance with the SCAQMD's LST methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standards and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

Cumulative Emissions

The SCAQMD's 2022 AQMP was prepared to accommodate growth, meet State and federal air quality standards, and minimize the fiscal impact that pollution control measures have on the local economy. According to the SCAQMD CEQA Air Quality Handbook, project-related emissions that fall below the established construction and operational thresholds should be considered less than significant unless there is pertinent information to the contrary. Conversely, projects that exceed these emission thresholds would be considered to have potentially significant cumulative impacts.

[4] California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures*, August 2010.

5 POTENTIAL IMPACTS AND MITIGATION

5.1 Air Quality Analysis

Overview of the Santa Ana General Plan Update Program EIR

The Santa Ana General Plan Update Program EIR (General Plan EIR) analyzed potential air quality impacts (construction, operations, localized, and cumulative impacts) associated with the buildout development potential of the General Plan. General Plan buildout was determined to exceed current population estimates for the City, and therefore the emissions associated with the additional population are not included in the current regional emissions inventory for the SCAB.

The General Plan EIR identified Air Quality Mitigation Measure AQ-1 and AQ-2 to reduce emissions from future development projects. The mitigation requires discretionary projects to prepare a technical assessment evaluating potential air quality impacts. Projects that have the potential to exceed SCAQMD thresholds are required to implement mitigation measures to reduce air pollutant emissions.

General Plan EIR Mitigation Measure AQ-1 reduces construction emissions by requiring fugitive dust control, U.S. EPA rated Tier 3 and Tier 4 construction equipment, properly maintained equipment, limiting nonessential idling to no more than five minutes, and using Super-Compliant VOC paints. General Plan EIR Mitigation Measure AQ-2 reduces operational emissions by requiring various measures focusing on industrial projects, as well as complying with voluntary measures in the CALGreen Code such as providing shower/changing facilities, facilities to support electric charging stations, Energy Star-certified appliances, and coordinating with the City of Santa Ana and Orange County Transit Authority to ensure that bus pad and shelter improvements are incorporated, as appropriate.

Incorporation of General Plan EIR Mitigation Measure AQ-2 into future development projects would contribute to reduced criteria air pollutant General Plan buildout emissions. Additionally, General Plan Update goals and policies would promote increased capacity for alternative transportation modes and implementation of transportation demand management strategies. However, the AQMP population and employment assumptions would continue to be exceeded and General Plan buildout was determined to be inconsistent with the AQMP.

The General Plan EIR acknowledges that individual projects accommodated under the General Plan Update may not exceed the SCAQMD regional significance thresholds, but the scale and extent of some General Plan Update construction activities could exceed the relevant SCAQMD thresholds. Implementation of General Plan EIR Mitigation Measure AQ-1 would reduce criteria air pollutant emissions from construction-related activities to the extent feasible. General Plan EIR Mitigation Measure AQ-2, in addition to the goals and policies of the General Plan Update, would reduce operational air pollutant emissions to the extent feasible. However, due to the magnitude of the overall land use development associated with the General Plan Update, construction and operational regional air quality impacts were determined to be significant and unavoidable.

Although the General Plan Update includes policies and implementation actions to reduce air pollutant emissions exposure within Environmental Justice (EJ) communities, the General Plan Update could result in specific development projects that could emit TACs. The General Plan Update was determined to result in projects that emit TACs in the vicinity of EJ communities and result in potentially significant localized air quality impacts. The project site is not within an identified EJ community.

Localized operation-related air quality impacts associated with implementation of the General Plan Update are considered potentially significant. General Plan EIR Mitigation Measures AQ-1 and AQ-2 would reduce the regional construction and operation emissions associated with buildout of the General Plan Update and also reduce localized construction- and operation-related criteria air pollutant emissions to the extent feasible. However, because existing sensitive receptors may be close to project-related construction activities and large emitters of on-site operation-related criteria air pollutant emissions, construction and operation emissions generated by individual development projects have the potential to exceed SCAQMD's LSTs and would result in a significant impact. Because buildout of the General Plan Update would not result in the increase in traffic volume required to generate a CO hotspot, impacts would be less than significant.

Threshold 5.1 Would the Project conflict with or obstruct implementation of the applicable air quality plan?

As part of its enforcement responsibilities, the U.S. EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the NAAQS. The State Implementation Plan must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment regarding the CAAQS and NAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The project site is located within the SCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the FCAA, to reduce emissions of criteria pollutants for which the SCAB is in nonattainment. To reduce such emissions, the SCAQMD drafted the 2022 AQMP. The 2022 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving CAAQS and NAAQS. The AQMP is a regional and multi-agency effort including the SCAQMD, the CARB, the SCAG, and the U.S. EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project is subject to the SCAQMD's AQMP.

Criteria for determining consistency with the AQMP are defined by the following indicators:

- **Consistency Criterion No. 1**: The Project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2**: The Project will not exceed the assumptions in the AQMP or increments based on the years of the Project build-out phase.

According to the SCAQMD's *CEQA Air Quality Handbook*, the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with CAAQS and NAAQS.

The violations to which Consistency Criterion No. 1 refers are exceedances of the CAAQS and NAAQS. As shown in **Table 10**, **Table 11**, and **Table 12**, despite the implementation of all feasible mitigation, Phase 1 and Phase 3 of the Project would exceed SCAQMD construction NO_X thresholds while Phase 2 construction emissions are below SCAQMD thresholds. Regarding operational emissions, Phase 1 would exceed the

operational ROG thresholds, despite the implementation of all feasible mitigations, while Phase 2 and Phase 3 would not exceed operational thresholds; refer to **Table 14**, **Table 16**, and **Table 18**. Mitigation Measures (**MM**) AQ-1 through MM AQ-7 are included to reduce construction and operational emissions to the greatest amount feasible. However, even with mitigation, construction and operational emissions would remain above the SCAQMD ROG and NO_X thresholds. Therefore, the Project would potentially contribute to an existing air quality violation. Thus, the Project is not consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans.

The project site is designated as District Center-High (DC-5). District Center-High is a mixed-use designation identified in the General Plan as including "Transit-oriented and high-density urban villages consisting of visually striking and dynamic buildings and spaces with a wide range and mix of residential, live-work, commercial, hotel, and employment-generating uses." The existing zoning for the project site is General Commercial (C2) north of Callen's Common, and Regional Commercial (CR) and General Commercial (C-2) south of Callen's Common and both designations include a range of commercial uses as well as all of the uses allowed in the Community Commercial (C-1) zone.

The applicant has proposed the Related Bristol Specific Plan to replace the existing zoning districts. The Related Bristol Specific Plan, upon adoption by the City Council, would become the zoning for the property and would define the allowable uses and development standards within its boundaries.

The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project proposes adoption of a specific plan and, although the specific plan would be consistent with the District Center-High designation and would implement the mixture of commentary uses assumed for that designation, the Project is assumed to result in a change of land use designations not reflected in the AQMP. Therefore, the Project is conservatively assumed to generate emissions not reflected within the current AQMP regional emissions inventory for the SCAB and is considered to be inconsistent with the AQMP. Thus, the Project is not consistent with the second criterion.

As noted above (and discussed further in Threshold 5.2, below), Project implementation would result in air pollutant emissions that exceed SCAQMD's construction and operational emission thresholds. Although mitigation would reduce emissions by the greatest feasible amount, Project emissions levels would remain significant. Therefore, the Project would be inconsistent with the AQMP, resulting in a significant and unavoidable impact despite the implementation of mitigation.

Mitigation Measures: Mitigation Measures **MM AQ-1** through **MM AQ-7** (refer to Impact Threshold 5.2, below).

Level of Significance: Significant and unavoidable impact. No additional feasible mitigation measures are available that can reduce impacts to less than significant. The City of Santa Ana General Plan Update Program EIR found that the AQMP population and employment assumptions would continue to be exceeded and General Plan buildout was determined to be inconsistent with the AQMP and impacts would be considered significant and unavoidable. In certifying the General Plan Update Program EIR and approving the General Plan project, the City Council approved a Statement of Overriding Considerations, which notes that there are specific economic, social, and other public benefits that outweigh the

significant unavoidable impacts associated with the General Plan project. The conclusions of this analysis with respect to AQMP consistency are consistent with the General Plan Findings of Fact and Statement of Overriding Considerations.

Threshold 5.2 Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable State or federal ambient air quality standard?

Construction Emissions

Construction associated with the Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include O_3-precursor pollutants (i.e., ROG and NO_X) and PM_{10} and $PM_{2.5}$. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site excavation and grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

Phase 1 Construction

Construction activities associated with Phase 1 of the Project are estimated to begin in early 2026 and be completed in early- to mid-2030. Construction-generated emissions associated with Phase 1 were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See **Appendix A: Air Quality Modeling Data** for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for Phase 1 are summarized in **Table 10: Phase 1 Construction-Related Emissions**.

Fugitive dust emissions may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. SCAQMD Rules 402 and 403 (prohibition of nuisances, watering of inactive and perimeter areas, track out requirements, etc.), are applicable to the Project and were applied in CalEEMod to minimize fugitive dust emissions. These rules are identified as applicable Laws, Ordinances, and Regulations (LORs), below. LOR AQ-1 requires the implementation of Rule 402 and 403 dust control techniques to minimize PM_{10} and $PM_{2.5}$ concentrations. While particulate matter impacts would be considered less than significant, the Project would be subject to SCAQMD Rules for reducing fugitive dust, described in the Regulatory Framework subsection above and identified in LOR AQ-1.

Table 10 shows that unmitigated construction emissions would exceed the SCAQMD threshold for the ozone precursors of NO_X and ROG (VOC). The majority of NO_X emissions occur from construction equipment exhaust and the majority of ROG emissions are generated during the architectural coatings phase of construction. **MM AQ-1** requires the off-road construction equipment greater than 50 horsepower to meet CARB Tier 4 Final emissions standards in order to reduce diesel exhaust construction emissions. **MM AQ-2** requires the Project to use "Super-Compliant" low VOC paints. **Table 10** shows that despite the implementation of **MM AQ-1**, Phase 1 construction emissions associated with NO_x would

remain above the SCAQMD's threshold (**MM AQ-2** applies to ROG emissions only). Therefore, impacts would be significant and unavoidable.

Table 10: Phase 1 Construction-Related Emissions

Construction Year	Emissions (Maximum Pounds Per Day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Unmitigated Emissions[1]						
Year 2026	20.42	312.60	272.02	1.21	62.19	19.19
Year 2027	18.00	100.28	286.37	0.36	61.94	16.43
Year 2028	17.40	96.06	274.90	0.36	61.72	16.23
Year 2029	131.30	91.06	239.20	0.36	61.57	16.10
Year 2030	131.20	6.72	34.53	0.01	10.30	2.46
Off-Site Improvements	3.17	29.09	35.60	0.07	4.27	1.74
Total Maximum Emissions	**131.30**	**312.60**	286.37	1.21	62.19	19.19
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Threshold?	**Yes**	**Yes**	**No**	**No**	**No**	**No**
Mitigated Emissions[2]						
Year 2026	14.87	158.10	225.96	0.96	60.20	14.84
Year 2027	12.87	52.72	240.47	0.28	60.19	14.83
Year 2028	12.50	51.27	229.02	0.28	60.19	14.83
Year 2029	24.27	48.32	193.52	0.28	60.19	14.83
Year 2030	24.20	3.30	29.81	0.00	10.24	2.40
Off-Site Improvements	2.31	10.08	47.53	0.08	3.39	0.93
Total Maximum Emissions	24.27	**158.10**	240.47	0.96	60.20	14.84
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment. Refer to Appendix A for Model Data Outputs.
2. Mitigation includes the incorporation of MM AQ-1 and MM AQ-2. MM AQ-1 requires off-road equipment 50 horsepower or greater to meet CARB Tier 4 Final standards. MM AQ-2 requires the use of "Super-Compliant" low VOC paints.

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 2 Construction

Phase 2 construction is anticipated to begin in early- to mid-2030 and be completed in late 2032. Construction-generated emissions associated with Phase 2 of the Project were calculated using the CARB-approved CalEEMod computer program. See **Appendix A: Air Quality Modeling Data** for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for Phase 2 of the Project are summarized in **Table 11: Phase 2 Construction-Related Emissions**. **Table 11** shows that unmitigated and mitigated construction emissions associated with Phase 2 would exceed the SCAQMD thresholds for NO_X and ROG (VOC) from construction equipment exhaust and architectural coatings, respectively. Implementation of **MM AQ-1** and **MM AQ-2** described above would reduce Phase 2 construction emissions to a less than significant level.

Table 11: Phase 2 Construction-Related Emissions

Construction Year	Emissions (Maximum Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Unmitigated Emissions[1]						
Year 2030	17.60	151.33	173.53	0.36	17.08	11.25
Year 2031	11.77	93.18	176.09	0.27	16.88	5.93
Year 2032	127.92	59.64	126.85	0.20	17.55	5.18
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	55
Exceed SCAQMD Threshold?	**Yes**	**Yes**	**No**	**No**	**No**	**No**
Mitigated Emissions[2]						
Year 2030	1.34	26.03	66.82	0.20	11.80	5.56
Year 2031	4.58	25.40	99.22	0.14	14.56	3.81
Year 2032	27.75	22.84	83.72	0.11	16.49	4.21
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment. Refer to Appendix A for Model Data Outputs.
2. Mitigation includes the incorporation of MM AQ-1 and MM AQ-2. MM AQ-1 requires off-road equipment 50 horsepower or greater to meet CARB Tier 4 Final standards. MM AQ-2 requires the use of "Super-Compliant" low VOC paints.

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 3 Construction

Phase 3 construction is anticipated to begin in early 2033 and be completed in mid-2036. Construction-generated emissions associated with Phase 3 of the Project were calculated using the CARB-approved CalEEMod computer program. See **Appendix A: Air Quality Modeling Data** for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for Phase 3 of the Project are summarized in **Table 12: Phase 3 Construction-Related Emissions**.

Table 12 shows that unmitigated construction emissions would exceed the SCAQMD threshold for the ozone precursors NO_X and ROG (VOC). The majority of NO_X emissions occur from construction equipment exhaust and the majority of ROG emissions are generated during the architectural coatings phase of construction. **MM AQ-1** requires the off-road construction equipment greater than 50 horsepower to meet CARB Tier 4 Final emissions standards in order to reduce diesel exhaust construction emissions. **MM AQ-2** requires the Project to use "Super-Compliant" low VOC paints. **Table 12** shows that the implementation of **MM AQ-1** and **MM AQ-2** would reduce Phase 3 construction emissions to a less than significant level.

Table 12: Phase 3 Construction-Related Emissions

	Emissions (Maximum Pounds Per Day)					
Construction Year	**ROG**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Unmitigated Emissions[1]						
Year 2033	16.57	188.71	190.30	0.91	40.42	13.43
Year 2034	19.47	181.23	271.93	0.91	93.32	23.38
Year 2035	19.30	85.67	291.78	0.44	93.24	23.31
Year 2036	121.86	89.87	297.01	0.45	109.27	27.04
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	55
Exceed SCAQMD Threshold?	**Yes**	**Yes**	**No**	**No**	**No**	**No**
Mitigated Emissions[2]						
Year 2033	2.85	86.39	109.62	0.66	37.12	9.62
Year 2034	16.01	83.56	233.59	0.66	92.48	22.61
Year 2035	15.93	55.26	253.90	0.37	92.47	22.61
Year 2036	38.25	57.50	254.98	0.37	108.54	26.37
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment. Refer to Appendix A for Model Data Outputs.
2. Mitigation includes the incorporation of MM AQ-1 and MM AQ-2. MM AQ-1 requires off-road equipment 50 horsepower or greater to meet CARB Tier 4 Final standards. MM AQ-2 requires the use of "Super-Compliant" low VOC paints.

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Operational Emissions

Phase 1 Unmitigated Operations

Project-generated emissions would be primarily associated with motor vehicle use and area sources, such as the use of landscape maintenance equipment and architectural coatings. Long-term Phase 1 operational emissions attributable to the Project are summarized in **Table 13: Unmitigated Phase 1 Operational Emissions**. **Table 13** shows that Phase 1 unmitigated operational emissions would exceed SCAQMD thresholds for ROG. Therefore, regional unmitigated operational emissions would result in a potentially significant long-term regional air quality impact.

Table 13: Unmitigated Phase 1 Operational Emissions

Source	Emissions (Maximum Pounds Per Day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Existing Conditions						
Mobile Emissions	51.03	28.44	269.56	0.51	10.26	2.27
Area Source Emissions	9.32	0.18	21.22	0.00	0.01	0.04
Energy Emissions	0.02	0.39	0.33	0.00	35.52	0.03
Total Existing Emissions	**60.38**	**29.01**	**291.11**	**0.51**	**45.79**	**2.34**
Phase 1						
Mobile Emissions	44.84	26.96	294.74	0.75	29.96	5.62
Area Source Emissions	77.10	1.57	177.45	0.01	0.15	0.20
Energy Emissions	0.45	7.90	4.69	0.05	0.62	0.62
Total Emissions	**122.39**	**36.43**	**476.88**	**0.81**	**30.73**	**6.44**
Net Emissions	*62.01*	*7.42*	*185.78*	*0.30*	*-15.06*	*4.10*
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	**Yes**	No	No	No	No	No

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 1 Mitigated Operations

As noted in **Table 13,** the Phase 1 unmitigated operational emissions would exceed the SCAQMD thresholds for ROG and NO_X. The majority of ROG and NO_X emissions are from area and mobile sources. Mitigation measures would be required to reduce emissions to the maximum extent feasible; however, emissions of motor vehicles are controlled by State and federal standards and the Project has no control over these standards.

MM AQ-3 through **MM AQ-7** have been identified to reduce operational emissions. **MM AQ-3** requires electrical hookups for refrigerated delivery trucks. **MM AQ-4** requires the implementation of a Transportation Demand Management (TDM) program to reduce single occupant vehicle trips and encourage transit. **MM AQ-5** prohibits the use of permanent wood-burning devices (consistent with SCAQMD Rule 445), and **MM AQ-6** requires all landscaping equipment used on site to be 100 percent electrically powered. **MM AQ-7** requires the implementation of "Super-Compliant" low VOC paint.

Laws, Ordinances, and Regulations (LOR) AQ-1 through LOR AQ-3 would further reduce the emission of particulate matter, ROG, NO_X, and CO. **Table 14: Mitigated Phase 1 Operational Emissions** shows that implementation of **MM AQ-3** through **MM AQ-7** would reduce Phase 1 net mitigated operational

emissions below the SCAQMD's thresholds; therefore, Phase 1 net operational impacts would be less than significant with mitigation incorporated.

Table 14: Mitigated Phase 1 Operational Emissions

Source	Emissions (Maximum Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing Conditions						
Mobile Emissions	51.03	28.44	269.56	0.51	10.26	2.27
Area Source Emissions	9.32	0.18	21.22	0.00	0.01	0.04
Energy Emissions	0.02	0.39	0.33	0.00	35.52	0.03
Total Existing Emissions	**60.38**	**29.01**	**291.11**	**0.51**	**45.79**	**2.34**
Phase 1						
Mobile Emissions[1]	38.87	22.83	247.90	0.62	24.84	4.66
Area Source Emissions[2]	51.14	0.00	0.00	0.00	0.00	0.00
Energy Emissions	0.41	7.25	4.37	0.05	0.57	0.57
Total Emissions	**90.42**	**30.08**	**252.27**	**0.67**	**25.41**	**5.23**
Net Emissions	*30.04*	*1.07*	*-38.83*	*0.16*	*-20.38*	*2.89*
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	No	No	No	No	No	No

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Incorporates implementation of a Transportation Demand Management (TDM) program pursuant to MM AQ-4.
2. Incorporates implementation of electric landscape equipment, prohibition of fireplaces, and low VOC paint pursuant to MM AQ-5, MM AQ-6, and MM AQ-7.

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 2 Unmitigated Operations

Similar to Phase 1, project-generated emissions would be primarily associated with motor vehicle use and area sources, such as the use of landscape maintenance equipment and architectural coatings. Long-term Phase 2 unmitigated operational emissions attributable to the Project are summarized in **Table 15: Unmitigated Phase 2 Operational Emissions**. **Table 15** shows that Phase 2 unmitigated operational emissions would be below the SCAQMD thresholds for all criteria pollutants. Therefore, regional unmitigated operational emissions for Phase 2 would result in a less than significant long-term air quality impact.

Phase 2 Mitigated Operations

As noted above, **Table 15** shows that Phase 2 unmitigated operational emissions would be below the SCAQMD thresholds for all criteria pollutants. The majority of ROG, CO, and particulate matters emissions are from area and mobile sources. Although Phase 2 unmitigated operational emissions do not exceed the SCAQMD thresholds, **MM AQ-3** through **MM AQ-7** associated with Phase 1 and Phase 3 have been also applied for Phase 2 for consistency throughout the Project and to minimize total Project emissions. Furthermore, LOR AQ-1 through LOR AQ-3 would further reduce the emission of particulate matter, ROG, NO_X, and CO. **Table 16: Mitigated Phase 2 Operational Emissions** shows that Phase 2 mitigated operational emissions would be below the SCAQMD's thresholds; therefore, impacts would be less than significant.

Table 15: Unmitigated Phase 2 Operational Emissions

Source	Emissions (Maximum Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing Conditions						
Mobile Emissions	8.00	7.53	40.34	39.79	1.54	0.34
Area Source Emissions	1.39	0.87	3.17	0.00	0.00	0.01
Energy Emissions	0.01	0.06	0.06	0.05	0.00	0.00
Total Existing Emissions	**9.41**	**8.46**	**43.57**	**39.84**	**1.54**	**0.35**
Phase 2						
Mobile Emissions	14.69	8.90	103.84	0.28	11.76	2.18
Area Source Emissions	32.70	0.71	80.15	0.00	0.06	0.08
Energy Emissions	0.15	2.51	1.11	0.02	0.20	0.20
Total Emissions	**47.54**	**12.12**	**185.10**	**0.30**	**12.02**	**2.46**
Net Emissions	*38.13*	*3.66*	*141.53*	*-39.54*	*10.48*	*2.11*
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	No	No	No	No	No	No

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Table 16: Mitigated Phase 2 Operational Emissions

Source	Emissions (Maximum Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing Conditions						
Mobile Emissions	8.00	7.53	40.34	39.79	1.54	0.34
Area Source Emissions	1.39	0.87	3.17	0.00	0.00	0.01
Energy Emissions	0.01	0.06	0.06	0.05	0.00	0.00
Total Existing Emissions	**9.41**	**8.46**	**43.57**	**39.84**	**1.54**	**0.35**
Phase 2						
Mobile Emissions[1]	11.73	6.93	80.09	0.21	8.94	1.66
Area Source Emissions[2]	21.90	0.00	0.00	0.00	0.00	0.00
Energy Emissions	0.13	2.23	0.99	0.01	0.18	0.18
Total Emissions	**33.76**	**9.16**	**81.08**	**0.23**	**9.12**	**1.84**
Net Emissions	*24.36*	*0.70*	*37.51*	*-39.61*	*7.57*	*1.49*
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	No	No	No	No	No	No

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Incorporates implementation of a Transportation Demand Management (TDM) program pursuant to MM AQ-4.
2. Incorporates implementation of electric landscape equipment, prohibition of fireplaces, and low VOC paint pursuant to MM AQ-5, MM AQ-6, and MM AQ-7.

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 3 Unmitigated Operations

Similar to Phase 1 and Phase 2, project-generated emissions would be primarily associated with motor vehicle use and area sources, such as the use of landscape maintenance equipment and architectural coatings. Long-term Phase 3 unmitigated operational emissions attributable to the Project are summarized in **Table 17: Unmitigated Phase 3 Operational Emissions. Table 17** shows that Phase 3 unmitigated operational emissions would be below the SCAQMD thresholds. Therefore, impacts would be less than significant.

Table 17: Unmitigated Phase 3 Operational Emissions

Source	Emissions (Maximum Pounds Per Day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Existing Conditions						
Mobile Emissions	38.54	21.48	203.58	0.38	7.75	1.72
Area Source Emissions	7.04	0.14	16.03	0.00	0.02	0.03
Energy Emissions	0.02	0.30	0.25	0.00	0.02	0.02
Total Existing Emissions	**45.60**	**21.91**	**219.86**	**0.38**	**7.79**	**1.77**
Phase 3						
Mobile Emissions	18.72	11.81	145.76	0.41	17.69	3.27
Area Source Emissions	51.58	1.18	132.84	0.01	0.09	0.12
Energy Emissions	1.26	21.52	9.25	0.14	1.74	1.74
Total Emissions	**71.56**	**34.52**	**287.85**	**0.55**	**19.52**	**5.13**
Net Emissions	*25.96*	*12.61*	*68.00*	*0.17*	*11.72*	*3.36*
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	No	No	No	No	No	No

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 3 Mitigated Operations

As noted in **Table 17**, Phase 3 unmitigated operational emissions would be below the SCAQMD thresholds for all criteria pollutants. The majority of emissions are from area and mobile sources. Although Phase 3 unmitigated operational emissions do not exceed the SCAQMD thresholds, **MM AQ-3** through **MM AQ-7** have been identified to reduce total operational emissions. **MM AQ-3** requires electrical hookups for refrigerated delivery trucks. **MM AQ-4** requires the implementation of a Transportation Demand Management (TDM) program to reduce single occupant vehicle trips and encourage transit. **MM AQ-5** prohibits the use of permanent wood-burning devices, and **MM AQ-6** requires all landscaping equipment used on site to be 100 percent electrically powered. **MM AQ-7** requires the implementation of "Super-Compliant" low VOC paint. Furthermore, LOR AQ-1 through LOR AQ-3 would further reduce the emission of particulate matter, ROG, NO_X, and CO. **Table 18: Mitigated Phase 3 Operational Emissions** shows that with implementation of **MM AQ-3** through **MM AQ-7**, Phase 3 mitigated operational emissions would be below the SCAQMD's for all criterial air pollutants; therefore, impacts would be less than significant.

Table 18: Mitigated Phase 3 Operational Emissions						
Source	**Emissions (Maximum Pounds Per Day)**					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Existing Conditions						
Mobile Emissions	38.54	21.48	203.58	0.38	7.75	1.72
Area Source Emissions	7.04	0.14	16.03	0.00	0.02	0.03
Energy Emissions	0.02	0.30	0.25	0.00	0.02	0.02
Total Existing Emissions	**45.60**	**21.91**	**219.86**	**0.38**	**7.79**	**1.77**
Phase 3						
Mobile Emissions[1]	13.85	8.62	105.86	0.30	12.76	2.36
Area Source Emissions[2]	36.53	0.00	0.00	0.00	0.00	0.00
Energy Emissions	1.12	19.10	8.22	0.12	1.54	1.54
Total Emissions	**51.49**	**27.72**	**114.08**	**0.42**	**14.30**	**3.90**
Net Emissions	*5.89*	*5.81*	*-105.78*	*0.03*	*6.51*	*2.13*
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	No	No	No	No	No	No
ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less						
1. Incorporates implementation of a Transportation Demand Management (TDM) program pursuant to MM AQ-4. 2. Incorporates implementation of electric landscape equipment, prohibition of fireplaces, and low VOC paint pursuant to MM AQ-5, MM AQ-6, and MM AQ-7.						
Source: CalEEMod version 2022. Refer to Appendix A for model outputs.						

Overlapping Emissions

Phase 1 Operations + Phase 2 Construction

As the Project would be constructed in phases, Phase 1 has the potential to be operational during Phase 2 construction. The overlapping emissions of Phase 1 operations and Phase 2 construction are shown in **Table 19: Project Overlapping Emissions (Phase 1 Operations + Phase 2 Construction)**. **Table 19** shows that total overlapping emissions would exceed SCAQMD thresholds for ROG with mitigation incorporated. The majority of the Project's emission exceedances are from mobile sources and cannot feasibly be reduced below the SCAQMD thresholds. Emissions from motor vehicles are controlled by State and federal standards and the Project has no control over these standards. However, mitigation measures have been included to reduce emissions to the maximum extent feasible and are discussed in detail below.

Phase 1 Operations + Phase 2 Operations + Phase 3 Construction

As mentioned above, the Project would be constructed in three phases; Phase 1 and Phase 2 have the potential to be operational during Phase 3 construction. The overlapping emissions of Phase 1 and Phase 2 operations and Phase 3 construction are shown in **Table 20: Project Overlapping Emissions (Phase 1 Operations + Phase 2 Operations + Phase 3 Construction). Table 20** shows that total overlapping mitigated emissions would exceed SCAQMD thresholds for ROG and NO_X. The majority of the Project's emission exceedances are from mobile sources and cannot feasibly be reduced below the SCAQMD thresholds. Emissions from motor vehicles are controlled by State and federal standards and the Project has no control over these standards. However, mitigation measures have been included to reduce emissions to the maximum extent feasible and are discussed in detail below.

Table 19: Project Overlapping Emissions (Phase 1 Operations + Phase 2 Construction)

Source	Emissions (Maximum Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Unmitigated Emissions						
Phase 1 Operations[1]	62.01	7.42	185.78	0.30	-15.06	4.10
Phase 2 Construction[2]	127.92	151.33	176.09	0.36	17.55	11.25
Total Unmitigated Overlapping Emissions	**189.93**	**158.75**	**361.87**	**0.66**	**2.49**	**15.34**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	**Yes**	**Yes**	**No**	**No**	**No**	**No**
Mitigated Emissions						
Phase 1 Operations[3]	30.04	1.07	-38.83	0.16	-20.38	2.89
Phase 2 Construction[2]	27.75	26.03	99.22	0.20	16.49	5.56
Total Mitigated Overlapping Emissions	**57.79**	**27.10**	**60.39**	**0.35**	**-3.89**	**8.45**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	**Yes**	No	No	No	No	No

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Refer to Table 13 (Unmitigated Phase 1 Operation Emissions).
2. Refer to Table 11 (Phase 2 Construction-Related Emissions). Note that Phase 2 construction would occur from 2030 to 2032. This table provides the maximum daily emissions from each year.
3. Refer to Table 14 (Mitigated Phase 1 Operational Emissions).

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Table 20: Project Overlapping Emissions (Phase 1 Operations + Phase 2 Operations + Phase 3 Construction)

Source	Emissions (Maximum Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Unmitigated Emissions						
Phase 1 Operations[1]	62.01	7.42	185.78	0.30	-15.06	4.10
Phase 2 Operations[2]	38.13	3.66	141.53	-39.54	10.48	2.11
Phase 3 Construction[3]	121.86	188.71	297.01	0.91	109.27	27.04
Total Unmitigated Overlapping Emissions	**222.01**	**199.79**	**624.31**	**-38.33**	**104.69**	**33.25**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**
Mitigated Emissions						
Phase 1 Operations[4]	30.04	1.07	-38.83	0.16	-20.38	2.89
Phase 2 Operations[5]	24.36	0.70	37.51	-39.61	7.57	1.49
Phase 3 Construction[3]	38.25	86.39	254.98	0.66	108.54	26.37
Total Mitigated Overlapping Emissions	**92.64**	**88.15**	**253.66**	**-38.79**	**95.73**	**30.75**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	**Yes**	**Yes**	**No**	No	No	No

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Refer to Table 12 (Unmitigated Phase 1 Operation Emissions).
2. Refer to Table 14 (Unmitigated Phase 2 Operation Emissions).
3. Refer to Table 11 (Phase 3 Construction-Related Emissions). Note that Phase 3 construction would occur from 2033 to 2036. This table provides the maximum daily emissions from each year.
4. Refer to Table 13 (Mitigated Phase 1 Operational Emissions).
5. Refer to Table 15 (Mitigated Phase 2 Operational Emissions).

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Project Buildout (Phase 1 + Phase 2 + Phase 3)

Long-term operational emissions attributable to the total Project are summarized in **Table 21: Project Buildout Mitigated Operational Emissions**. As indicated in **Table 21**, total operational emissions for the Project at buildout would exceed SCAQMD thresholds for ROG and CO. The majority of the Project's emission exceedances are from mobile sources cannot feasibly be reduced below the SCAQMD threshold. Emissions from motor vehicles are controlled by State and federal standards and the Project has no control over these standards. However, mitigation measures have been included to reduce emissions to the maximum extent feasible.

Table 21: Project Buildout Mitigated Operational Emissions

Source	Emissions (Maximum Pounds Per Day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing Emissions						
Phase 1 Existing	60.38	29.01	291.11	0.51	45.79	2.34
Phase 2 Existing	9.41	8.46	43.57	39.84	1.54	0.35
Phase 3 Existing	45.60	21.91	219.86	0.38	7.79	1.77
Total Existing Emissions	**115.38**	**59.38**	**554.53**	**40.73**	**55.13**	**4.46**
Proposed Project						
Phase 1 Operations	90.42	30.08	252.27	0.67	25.41	5.23
Phase 2 Operations	33.76	9.16	81.08	0.23	9.12	1.84
Phase 3 Operations	51.49	27.72	114.08	0.42	14.30	3.90
Total Project Emissions	**175.67**	**66.95**	**447.43**	**1.31**	**48.83**	**10.97**
Net Emissions	***60.28***	***7.57***	***-107.10***	***-39.42***	***-6.30***	***6.51***
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	**Yes**	No	No	No	No	No

ROG = Reactive Organic Gases; NO_X = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

MM AQ-3 through **MM AQ-7** have been identified to reduce operational emissions from mobile sources. **MM AQ-3** requires electrical hookups for refrigerated delivery trucks. **MM AQ-4** requires the implementation of a Transportation Demand Management (TDM) program to reduce single-occupant vehicle trips and encourage public transit. **MM AQ-5** prohibits the use of permanent wood-burning devices, and **MM AQ-6** requires all landscaping equipment used on site to be 100 percent electrically powered. **MM AQ-7** requires the implementation of "Super-Compliant" low VOC paint. **Table 21** shows that despite the implementation of **MM AQ-3** through **MM AQ-7**, ROG emissions would be above the SCAQMD's threshold; therefore, impacts would be significant and unavoidable.

Cumulative Short-Term Emissions

The SCAB is designated nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards and nonattainment for O_3 and $PM_{2.5}$ for federal standards. Appendix D of the SCAQMD White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (2003) notes that projects that result in emissions that do not exceed the project-specific SCAQMD regional thresholds of significance should result in a less than significant impact on a cumulative basis unless there is other pertinent information to the contrary. Therefore, if a project is estimated to result in emissions that do not exceed the thresholds, the project's contribution to the cumulative impact on air quality in the SCAB would not be cumulatively considerable. As shown in **Table 10**, **Table 11**, and **Table 12**, construction of Phase 1 would exceed the

SCAQMD significance thresholds for NO_X while construction of Phase 2 and Phase 3 would be below the thresholds. Despite the implementation of **MM AQ-1**, NO_X emissions would remain above the SCAQMD's thresholds; therefore, the proposed Project would generate a cumulatively considerable contribution to air pollutant emissions during construction.

The SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the FCAA mandates. SCAQMD rules, mandates, and compliance with adopted AQMP emissions control measures would also be imposed on construction projects throughout the SCAB, which would include related projects. Compliance with SCAQMD rules and regulations would further reduce the Project construction-related impacts. However, as Project construction emissions would exceed SCAQMD thresholds. Construction emissions associated with the Project would represent a cumulatively considerable contribution to significant cumulative air quality impacts.

Cumulative Long-Term Impacts

The SCAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to the SCAB's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown in **Table 21: Project Buildout Mitigated Operational Emissions**, the Project's buildout operational emissions (primarily are mobile source emissions) would exceed the SCAQMD threshold for ROG despite the implementation of mitigation. As a result, operational emissions associated with the Project would result in a cumulatively considerable contribution to significant cumulative air quality impacts. Emissions of motor vehicles are controlled by State and federal standards and the Project has no control over these standards. LORs and implementation of operational **MM AQ-3** through **MM AQ-7** would reduce emissions by reducing the number of employee vehicles on-site and implementation of "Super-Compliant" low VOC paint. While the Project has some control over mobile source efficiencies, the majority of the mobile source emissions are beyond the Project's control. Therefore, no additional feasible mitigation measures beyond **MM AQ-3** through **MM AQ-7** are available to further reduce emissions, and cumulative long-term impacts would remain significant and unavoidable.

Laws, Ordinances, and Regulations

LORs are existing requirements that are based on local, State, or federal regulations or laws that are frequently required independently of CEQA review. Typical LORs include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because LORs are neither project-specific nor a result of development of the Project, they are not considered to be either Project Design Features or Mitigation Measures.

LOR AQ-1 Prior to the issuance of grading permits, the City Engineer shall confirm that the Grading Plan, Building Plans and Specifications require all construction contractors to comply with South Coast Air Quality Management District's (SCAQMD) Rules 402 and 403 to minimize construction emissions of dust and particulates. The measures include, but are not limited to, the following:

- Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
- All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- All material transported off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

LOR AQ-2 Pursuant to SCAQMD Rule 1113, the Project Applicant shall require by contract specifications that the interior and exterior architectural coatings (paint and primer including parking lot paint) products used would have a volatile organic compound rating of 50 grams per liter or less. It should be noted that **MM AQ-7** requires the volatile organic compound rating to be reduced to 10 g/L or less during construction.

LOR AQ-3 Require diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations, Section 2449.

LOR AQ-4 Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the City's Water Efficient Landscape requirements (Chapter 41 Section 813 of the City's Municipal Code).

LOR AQ-5 Provide bicycle parking facilities in accordance with Santa Ana Municipal Code Section 41.1307.1.

LOR AQ-6 The Project shall be designed in accordance with the applicable 2022 Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10(b)1) require buildings to be designed to have 15 percent of the roof area "solar ready" that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

LOR AQ-7 The Project shall be designed in accordance with the applicable 2022 California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 4.303 (residential) and Section 5.303 (nonresidential) of the California Green Building Standards Code Part 11.

- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 4.408.1 (residential) and Section 5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 4.410 (residential) and Section 5.410 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicles. At least eight percent of the total parking spaces are required to be designated in accordance Section 5.106.5.2 (nonresidential), Designated Parking for Clean Air Vehicles, of the California Green Building Standards Code Part 11.
- To facilitate future installation of electric vehicle supply equipment (EVSE), residential construction shall comply with Section 4.106.4 (residential electric vehicle charging) of the California Green Building Standards Code Part 11 and nonresidential construction shall comply with Section 5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.
- Mechanically ventilated buildings shall comply with Section 5.504.5.3 (Filters) of the California Green Building Standards Code Part 11 and provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Mitigation Measures

The General Plan EIR includes Mitigation Measures (MM) AQ-1 and MM AQ-2 to address future development project construction and operational emissions, respectively. The mitigation requires discretionary projects to prepare a technical assessment evaluating potential air quality impacts, which is addressed in this analysis. The General Plan EIR mitigation measures provide example actions to reduce emissions, which have been incorporated in the measures below, as applicable.

General Plan Update Mitigation Measures:

GP MM AQ-1 Prior to discretionary approval by the City of Santa Ana for development projects subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Santa Ana for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD's adopted thresholds of significance, the City of Santa Ana shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City.

Mitigation measures to reduce construction-related emissions could include, but are not limited to:

- Require fugitive-dust control measures that exceed South Coast AQMD's Rule 403, such as:
  - Use of nontoxic soil stabilizers to reduce wind erosion.
  - Apply water every four hours to active soil-disturbing activities.
  - Tarp and/or maintain a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
- Use construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower.
- Ensure that construction equipment is properly serviced and maintained to the manufacturer's standards.
- Limit nonessential idling of construction equipment to no more than five consecutive minutes.
- Limit on-site vehicle travel speeds on unpaved roads to 15 miles per hour.
- Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the project area.
- Use Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast AQMD's website.

(This technical analysis fulfills the General Plan EIR MM AQ-1 requirement for a technical assessment evaluating potential project construction-related air quality emissions. Project specific mitigation is provided below.)

GP MM AQ-2 Prior to discretionary approval by the City of Santa Ana for development projects subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation phase-related air quality impacts to the City of Santa Ana for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD's adopted thresholds of significance, the City of Santa Ana shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following:

- For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.

- Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.
- Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 § 2485).
- Provide changing/shower facilities as specified in Section A5.106.4.3 of the CALGreen Code (Nonresidential Voluntary Measures).
- Provide bicycle parking facilities per Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code and Sec. 41-1307.1 of the Santa Ana Municipal Code.
- Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of the CALGreen Code (Nonresidential Voluntary Measures).
- Provide facilities to support electric charging stations per Section A5.106.5.3 (Nonresidential Voluntary Measures) and Section A5.106.8.2 (Residential Voluntary Measures) of the CALGreen Code.
- Applicant-provided appliances (e.g., dishwashers, refrigerators, clothes washers, and dryers) shall be Energy Star–certified appliances or appliances of equivalent energy efficiency. Installation of Energy Star–certified or equivalent appliances shall be verified by Building & Safety during plan check.
- Applicants for future development projects along existing and planned transit routes shall coordinate with the City of Santa Ana and Orange County Transit Authority to ensure that bus pad and shelter improvements are incorporated, as appropriate.

(This technical analysis fulfills the General Plan EIR MM AQ-2 requirement for a technical assessment evaluating potential project operation-related air quality emissions. Project specific mitigation is provided below.)

Project Specific Mitigation Measures:

MM AQ-1 **Construction Exhaust and Dust Control.** Prior to issuance of Phase 1, Phase 2, and Phase 3 grading permits, the Project Applicant shall prepare and submit documentation to the City of Santa Ana that demonstrates the following:

- Require fugitive-dust control measures that exceed SCAQMD Rule 403 requirements:
  - Apply water at least three times daily to active soil-disturbing activities.
  - Tarp and/or maintain a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
  - Limit on-site vehicle travel speeds on unpaved roads to 15 miles per hour.

  - Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the project area.

- All off-road diesel-powered construction equipment greater than 50 horsepower meets California Air Resources Board Tier 4 Final off-road emissions standards. Requirements for Tier 4 Final equipment shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment. A copy of each equipment's Best Available Control Technology (BACT) documentation (certified tier specification or model year specification), and CARB or SCAQMD operating permit (if applicable) shall be provided to the City at the time of mobilization of each applicable unit of equipment.
- Construction equipment shall be properly maintained according to manufacturer specifications. All equipment maintenance records and data sheets, including design specifications and emission control tier classifications shall be kept onsite and furnished to the lead agency or other regulators upon request.
- All construction equipment and delivery vehicles shall be turned off when not in use, or limit on-site idling for no more than 5 minutes in any 1 hour.
- On-site electrical hook ups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel powered electric generators. Construction contracts shall require all off-road equipment with a power rating below 19 kilowatts (25 horsepower) (e.g., plate compactors, pressure washers, etc.) used during project construction be battery powered.
- Prepare a construction traffic control plan detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.
- Provide information on transit and ridesharing programs and services to construction employees.

MM AQ-2 **Low VOC Paint (Construction)**. During construction, the Project shall use "Super-Compliant" low VOC paints which have been reformulated to exceed the regulatory VOC limits (i.e., have a lower VOC content than what is required) put forth by SCAQMD's Rule 1113 for all architectural coatings. Super-Compliant low VOC paints shall be no more than 10g/L of VOC. Prior to issuance of building permits, the City of Santa Ana shall confirm that plans include the following specifications:

- All architectural coatings will be Super-Compliant low VOC paints.
- Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
- Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
- For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain. Set aside the can of cleanup water and take it to the hazardous waste center (www.cleanup.org).

- Use compliant low-VOC cleaning solvents to clean paint application equipment.
- Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions.
- Contractors shall construct/build with materials that do not require painting and use pre-painted construction materials to the extent practicable.
- Use high-pressure/low-volume paint applicators with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.

MM AQ-3 Prior to the approval of building permits, the City of Santa Ana shall confirm the construction documents demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.

MM AQ-4 **Vehicle Trip Reduction**. Develop a qualifying Commute Trip Reduction (CTR)/ Transportation Demand Management (TDM) plan to reduce mobile GHG emissions for all uses. The TDM plan shall be approved by the City of Santa Ana prior to the issuance of building permits. The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The following measures shall be incorporated into the TDM plan.

TDM Requirements for Non-Residential Uses:

- The Project Applicant shall consult with the local transit service provider to maintain and identify opportunities to maximize transit. Evidence of compliance with this requirement may include correspondence from the local transit provider(s) regarding the potential need for installing bus shelters or bus stops at the site.
- The portion of the TDM plan for non-residential uses shall include, but not be limited to the following potential measures: ride-matching assistance, preferential carpool parking, flexible work schedules for carpools, half-time transportation coordinators, providing a web site or message board for coordinating rides, designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles, and including bicycle end of trip facilities (such as bicycle parking and changing/shower facilities). This list may be updated as new methods become available. Verification of this measure shall occur prior to building permit issuance for the commercial uses.

TDM Requirements for Residential Units:

- Rental Units. Upon a residential dwelling being rented or offered for rent, the Project Applicant shall notify and offer to the tenant or prospective tenant, materials describing public transit, ridesharing, and nonmotorized commuting opportunities in the vicinity of the development. The materials shall be approved by the City of Santa Ana. The materials shall be provided no later than the time the rental agreement is executed. This information shall be submitted to the City of Santa Ana Planning Division for review and approval, prior to the issuance of the first certificate of occupancy.

MM AQ-5 **Prohibition of Fireplaces**. The installation of wood-burning and natural gas devices shall be prohibited inside residential dwelling units. The purpose of this measure is to limit emissions of ROG, NO_X, and particulate matter emissions from wood-burning and natural gas devices used for primary heat, supplemental heat, or ambiance. This prohibition shall be noted on the deed and/or lease agreements for tenants to obey.

MM AQ-6 **Electric Landscape Equipment**. Prior to the issuance of occupancy permits, the Planning Division shall confirm that the Project's Codes Covenants and Restrictions (CC&Rs) and/or tenant lease agreements include contractual language that all landscaping equipment used on site shall be 100 percent electrically powered. All residential and non-residential properties shall be equipped with exterior electrical outlets to accommodate this requirement. This requirement shall be included in the third-party vendor agreements for landscape services for the building owner and tenants, as applicable.

MM AQ-7 **Low VOC Paint (Operations)**. The Project Applicant shall require by contract specifications for commercial development to use interior and exterior architectural coatings (paint and primer including parking lot paint) products that have a volatile organic compound rating of 10 grams per liter or less. Contract specifications shall be reviewed and approved by the City of Santa Ana prior to the issuance of occupancy permits. This measure shall be made a condition of approval for continued upkeep of the property.

Level of Significance: Significant and unavoidable impact for constructional and operational emissions despite the implementation of **MM AQ-1** through **MM AQ-7**. No additional feasible mitigation measures are available that can reduce emission impacts to less than significant. The City of Santa Ana General Plan Update Program EIR found that the construction and operational air quality impacts would be significant and unavoidable. In certifying the General Plan Update Program EIR and approving the General Plan project, the City Council approved a Statement of Overriding Considerations, which notes that there are specific economic, social, and other public benefits that outweigh the significant unavoidable impacts associated with the General Plan project. The conclusions of this analysis with respect to construction and operational air quality are consistent with the General Plan Findings of Fact and Statement of Overriding Considerations.

Threshold 5.3 Would the Project expose sensitive receptors to substantial pollutant concentrations?

Localized Construction Significance Analysis

The Project will be constructed in three phases (refer to **Exhibit 3**). Phase 1 will begin construction in early 2026 and be operational by the second quarter 2030. The nearest off-site receptor to the Phase 1 construction site is a multi-family residential building located approximately 130 feet (40 meters) to the northwest of the project site (Phase 1). Phase 2 of the Project is located in the northeastern portion of the project site and is anticipated to begin construction in early 2030 and be operational by 2033. The nearest off-site receptor to the Phase 2 construction site is a multi-family residential building located 410 feet (125 meters) to the north of the project site (Phase 2). Phase 3 of the Project is located in the northwestern portion of the project site and is anticipated to begin construction in early 2033 and be operational by the third quarter of 2036. The nearest off-site receptor to the Phase 3 construction site is a multi-family residential building located 130 feet (40 meters) to the west of the project site (Phase 3).

To identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific emissions.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, **Table 22: Equipment-Specific Grading Rates** is used to determine the maximum daily disturbed acreage for comparison to LSTs.

Table 22: Equipment-Specific Grading Rates

Construction Phase	Equipment Type	Equipment Quantity	Acres Graded per 8-Hour Day	Operating Hours per Day	Acres Graded per Day
Phase 1 Grading	Tractors	2	0.5	8	1.0
	Graders	1	0.5	8	0.5
	Dozers	1	0.5	8	0.5
	Scrapers	2	1	8	2.0
				Total Acres Graded per Day	**4.0**
Phase 2 Site Prep	Tractors	4	0.5	8	2
	Graders	0	0.5	8	0
	Dozers	3	0.5	8	1.5
	Scrapers	0	1	8	0
				Total Acres Graded per Day	**3.5**
Phase 3 Grading	Tractors	2	0.5	8	1.0
	Graders	1	0.5	8	0.5
	Dozers	1	0.5	8	0.5
	Scrapers	2	1	8	2.0
				Total Acres Graded per Day	**4.0**

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

The appropriate SRA for the localized significance thresholds is the Central Orange County (SRA 17) since this area includes the project site. LSTs apply to NO_2, CO, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5 acres in size. CalEEMod construction modeling for Phase 1 and Phase 3 anticipates that both phases will use similar equipment, while Phase 2

use less equipment during grading. Project construction during Phase 1 and Phase 3 are anticipated to disturb a maximum of 4.0 acres in a single day during grading. Project construction during Phase 2 is anticipated to disturb a maximum of 3.5 acres in a single day during site preparation. As the LST guidance provides thresholds for projects disturbing 1-, 2-, and 5-acres in size and the thresholds increase with size of the site, the LSTs for a 3.5- and 4.0-acre thresholds were interpolated and utilized for this analysis.

Phase 1 Construction Emissions

The SCAQMD's methodology states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, only emissions included in the CalEEMod "on-site" emissions outputs were considered. The nearest off-site sensitive receptor to the Phase 1 construction area is a multi-family residential building located approximately 130 feet (40 meters) to the northwest of the project site (Phase 1). LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for receptors located at 50 meters were utilized in this analysis. **Table 23: Localized Significance of Phase 1 Construction Emissions** presents the unmitigated and mitigated results of localized emissions during each construction activity during Phase 1. As discussed under Threshold 5.2, **MM AQ-1** requires the off-road construction equipment greater than 50 horsepower to meet CARB Tier 4 Final emissions standards in order to reduce diesel exhaust construction emissions. **MM AQ-2** requires the Project to use "Super-Compliant" low VOC paints. **Table 23** shows that emissions of these pollutants on the peak day of Phase 1 construction would be less than significant with mitigation incorporated.

Table 23: Localized Significance of Phase 1 Construction Emissions

Construction Activity	Emissions (Maximum Pounds Per Day)							
	Unmitigated				Mitigated			
	NO_X	CO	PM_{10}	$PM_{2.5}$	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	123.91	114.03	20.59	7.01	9.01	36.35	15.66	2.48
Site Preparation	174.98	172.85	17.68	12.11	5.18	56.62	10.42	5.45
Grading	163.35	165.42	11.61	8.11	8.85	70.70	5.13	2.16
Building Construction (2026)	59.12	77.80	2.27	2.09	8.80	31.74	0.28	0.26
Building Construction (2027)	56.35	77.63	2.02	1.86	8.78	31.73	0.27	0.26
Building Construction (2028)	53.55	77.61	1.80	1.66	8.76	31.72	0.27	0.26
Building Construction (2029)	51.49	77.41	1.65	1.52	8.75	31.72	0.27	0.26
Paving	38.75	59.51	1.43	1.32	3.87	21.20	0.06	0.06
Architectural Coating (2029)	4.76	6.67	0.08	0.07	1.29	1.93	0.00	0.00
Architectural Coating (2030)	4.71	6.64	0.07	0.06	1.29	1.93	0.00	0.00
Off-Site Improvements	29.09	35.6	4.27	1.74	10.08	47.53	3.39	0.93
SCAQMD Localized Screening Threshold (adjusted for 4.0 acres at 40 meters)	*154*	*1,331*	*24*	*7*	*154*	*1,331*	*24*	*7*
Exceed SCAQMD Threshold?	**Yes**	**No**	**No**	**Yes**	**No**	**No**	**No**	**No**

NO_X = Nitrogen Oxides; CO = Carbon Monoxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 2 Construction Emissions

The nearest off-site sensitive receptor to the Phase 2 construction area is a multi-family residential building located 410 feet (125 meters) to the north of the project site (Phase 2) and the nearest on-site receptors (Phase 1 residences) would be approximately 40 meters away. LST thresholds are provided for

distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for on-site receptors located at 40 meters were interpolated and conservatively used in this analysis (i.e., LSTs at 40 meters are lower than LSTs at 125 meters and are therefore conservative. **Table 24: Localized Significance of Phase 2 Construction Emissions** presents the results of unmitigated and mitigated localized emissions during each construction activity during Phase 2. As discussed above, **MM AQ-1** and **MM AQ-2** require equipment to meet Tier 4 Final emissions standards and the use of "Super-Compliant" low VOC paints. **Table 24** shows that emissions of these pollutants on the peak day of Phase 2 construction would be less than significant with mitigation incorporated.

Table 24: Localized Significance of Phase 2 Construction Emissions

Construction Activity	Emissions (Maximum Pounds Per Day)							
	Unmitigated				Mitigated			
	NO_X	CO	PM_{10}	$PM_{2.5}$	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	108.75	112.04	12.71	5.24	9.01	36.35	8.53	1.40
Site Preparation	151.25	170.59	16.62	11.14	5.18	56.62	10.42	5.45
Grading	75.70	104.07	6.79	4.62	4.08	35.53	3.82	1.90
Building Construction (2031)	48.71	77.07	1.46	1.34	13.82	38.30	0.35	0.32
Building Construction (2032)	47.22	76.72	1.34	1.24	13.75	38.28	0.33	0.31
Paving (2030)	37.68	59.37	1.32	1.22	3.87	21.20	0.06	0.06
Paving (2031)	36.75	59.30	1.26	1.16	3.87	21.20	0.06	0.06
Architectural Coating	4.62	6.60	0.05	0.04	1.29	1.93	0.00	0.00
SCAQMD Localized Screening Threshold (adjusted for 3.5 acres at 40 meters)	144	1,226	21	7	144	1,226	21	7
Exceed SCAQMD Threshold?	**Yes**	**No**	**No**	**Yes**	**No**	**No**	**No**	**No**

NO_X = Nitrogen Oxides; CO = Carbon Monoxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 3 Construction Emissions

The nearest off-site sensitive receptor to the Phase 3 construction area is a multi-family residential building located 130 feet (40 meters) to the west of the project site (Phase 3) and the nearest on-site receptors (Phase 1 and Phase 2 residences) would be approximately 40 meters away. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for receptors located at 40 meters were interpolated and utilized in this analysis.

Table 25: Localized Significance of Phase 3 Construction Emissions presents the results of the unmitigated and mitigated localized emissions during each construction activity during Phase 3. As discussed above, **MM AQ-1** and **MM AQ-2** require equipment to meet Tier 4 Final emissions standards and the use of "Super-Compliant" low VOC paints. **Table 25** shows that emissions of these pollutants on the peak day of Phase 3 construction would be less than significant with mitigation incorporated.

Table 25: Localized Significance of Phase 3 Construction Emissions								
	Emissions (Maximum Pounds Per Day)							
	Unmitigated				**Mitigated**			
Construction Activity	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Demolition	93.05	95.60	18.36	5.42	9.01	36.35	15.05	2.39
Site Preparation	127.02	146.29	15.40	10.01	5.18	56.62	10.42	5.45
Grading (2033)	111.18	151.37	9.22	5.96	8.85	70.70	5.07	2.15
Grading (2034)	106.52	150.41	8.89	5.65	8.85	70.70	5.07	2.15
Building Construction (2034)	45.12	76.60	1.15	1.06	13.65	38.25	0.31	0.29
Building Construction (2035)	44.02	76.12	1.08	0.99	13.61	38.25	0.31	0.29
Building Construction (2036)	42.73	75.62	1.01	0.93	13.57	38.25	0.30	0.28
Paving	35.13	58.94	1.06	0.98	3.87	21.20	0.06	0.06
Architectural Coating	4.51	6.58	0.03	0.03	1.29	1.93	0.00	0.00
SCAQMD Localized Screening Threshold (adjusted for 4.0 acres at 40 meters)	*154*	*1,331*	*24*	*7*	*154*	*1,331*	*24*	*7*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**Yes**	**No**	**No**	**No**	**No**
NO_X = Nitrogen Oxides; CO = Carbon Monoxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less								
Source: CalEEMod version 2022. Refer to Appendix A for model outputs.								

As shown in **Table 23**, **Table 24**, and **Table 25**, construction emissions for Phase 1, Phase 2, and Phase 3 of the Project are below SCAQMD LSTs. Construction LST impacts would be less than significant with mitigation incorporated.

Localized Operational Significance Analysis

The operational phase LST protocol applies to on-site emissions sources (area and energy sources) for all three phases. It is noted that the SCAQMD's LSTs are screening thresholds for localized emissions based on location, distance, and site size. It is inappropriate to overlap construction and operational localized emissions because the emissions would occur at different locations and different distances. Due to air dispersion, pollution concentrations would be different from sources at two different distances from a receptor. As noted above, the LSTs are screening thresholds and are therefore conservative. The construction LST acreage is determined based the expected daily acreage disturbed, while the operational LST acreage is based on the total area of the project site. Although the project site is greater than five acres, the 5-acre operational LSTs are conservatively used to evaluate the Project. The SCAQMD has developed separate LSTs for construction and operations. Construction emissions are temporary and move around on-site and operational emissions are stationary. Due to the differences in nature between construction and operational emissions sources as well as differences in distances to receptors, and separate threshold levels, it is inappropriate to combine construction and operational LSTs. Phases that are individually below the applicable LSTs would not contribute to an overall impact. This analysis conservatively analyzes total Project buildout operational emissions against the LSTs, below.

Phase 1 Operations

LSTs thresholds for receptors located at 40 meters in SRA 17 were utilized in this analysis of Phase 1 operations because the closest off-site receptors to the Phase 1 area is located approximately 130 feet (40 meters) to the northwest and the closest on-site receptors would be located approximately 130 feet (40 meters) away. Although the Phase 1 area of the project site is approximately 19.6 acres, the 5-acre

LST threshold was conservatively used for the Project, as the LSTs increase with the size of the site and distance from receptors.

The emissions shown in **Table 26: Localized Significance of Phase 1 Operational Emissions** includes all on-site project-related stationary sources after incorporating mitigation measures required under Threshold 5.2. **Table 26** shows that Phase 1 operational unmitigated and mitigated maximum daily emissions would not result in significant concentrations of pollutants at nearby sensitive receptors.

Table 26: Localized Significance of Phase 1 Operational Emissions

On-Site Emissions Source[1]	Emissions (Maximum Pounds Per Day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Unmitigated	9.47	182.14	0.77	0.82
Mitigated	7.25	4.37	0.57	0.57
SCAQMD Localized Screening Threshold (adjusted for 5 acres at 40 meters)	*173.40*	*1,541.60*	*7.20*	*2.43*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**

NO_X = Nitrogen Oxides; CO = Carbon Monoxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Includes all area sources emissions and energy emissions.

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 2 Operations

LSTs thresholds for receptors located at 40 meters in SRA 17 were utilized in this analysis of Phase 2 operations because the closest off-site receptors to the Phase 2 area is located approximately 410 feet (125 meters) to the north and the closest on-site receptors would be located approximately 130 feet (40 meters) away. Although the Phase 2 area of the project site is approximately 7.2 acres, the 5-acre LST threshold was conservatively used for the Project, as the LSTs increase with the size of the site and distance from receptors.

The emissions shown in **Table 27: Localized Significance of Phase 2 Operational Emissions** includes all on-site project-related stationary source after incorporating mitigation measures required under Threshold 5.2. **Table 27** shows that Phase 2 operational unmitigated and mitigated maximum daily emissions would not result in significant concentrations of pollutants at nearby sensitive receptors.

Table 27: Localized Significance of Phase 2 Operational Emissions

On-Site Emissions Source[1]	Emissions (Maximum Pounds Per Day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Unmitigated	3.22	81.26	0.26	0.28
Mitigated	2.23	0.99	0.18	0.18
SCAQMD Localized Screening Threshold (for 5 acres at 40 meters)	*173.40*	*1,541.60*	*7.20*	*2.43*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**

NO_X = Nitrogen Oxides; CO = Carbon Monoxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Includes all area sources emissions and energy emissions.

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Phase 3 Operations

LSTs thresholds for receptors located at 40 meters in SRA 17 were utilized in this analysis of Phase 3 operations because the closest off-site and on-site receptors to the Phase 3 area are approximately 130 feet (40 meters) to the west and east, respectively. Although the Phase 3 area of the project site is approximately 14.3 acres, the 5-acre LST threshold was conservatively used for the Project, as the LSTs increase with the size of the site and distance from receptors.

The emissions shown in **Table 28: Localized Significance of Phase 3 Operational Emissions** includes all on-site project-related stationary source after incorporating mitigation measures required under Threshold 5.2. **Table 28** shows that Phase 3 operational unmitigated and mitigated maximum daily emissions would not result in significant concentrations of pollutants at nearby sensitive receptors.

Table 28: Localized Significance of Phase 3 Operational Emissions

On-Site Emissions Source[1]	Emissions (Maximum Pounds Per Day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Unmitigated	22.71	142.09	1.83	1.86
Mitigated	19.10	8.22	1.54	1.54
SCAQMD Localized Screening Threshold (adjusted for 5 acres at 40 meters)	*173.40*	*1,541.60*	*7.20*	*2.43*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**

NO_X = Nitrogen Oxides; CO = Carbon Monoxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Includes all area sources emissions and energy emissions.

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Project Buildout (Phase 1, Phase 2, and Phase 3 Emissions Combined)

Table 26, **Table 27**, and **Table 28** show that emissions for Phase 1, Phase 2, and Phase 3 individually do not exceed operational LSTs. **Table 29: Localized Significance of Operational Emissions at Project Buildout** shows the combined operational emissions for the entire Project.

For Project Buildout, the nearest receptors are approximately 130 feet (40 meters) away. In addition, although the entire project site is approximately 41 acres, the 5-acre LST threshold was used for the entire project site. LSTs increase with the size of the site, applying a 5-acre LST threshold is an extremely conservative approach. As shown in **Table 29**, mitigated emissions generated on the site by the Project would not exceed the LSTs. Therefore, operational LST impacts would be less than significant with mitigation incorporated (**MM AQ-5** through **MM AQ-7** would reduce on-site emissions by prohibiting fireplaces, requiring zero emission landscape equipment, and requiring low VOC paint).

Table 29: Localized Significance of Operational Emissions at Project Buildout				
	Emissions (Maximum Pounds Per Day)			
On-Site Emissions Source[1]	NO_X	CO	PM_{10}	$PM_{2.5}$
Unmitigated				
Phase 1	9.47	182.14	0.77	0.82
Phase 2	3.22	81.26	0.26	0.28
Phase 3	22.71	142.09	1.83	1.86
Total Unmitigated	**35.40**	**405.49**	**2.86**	**2.96**
Mitigated[2]				
Phase 1	7.25	4.37	0.57	0.57
Phase 2	2.23	0.99	0.18	0.18
Phase 3	19.10	8.22	1.54	1.54
Total Mitigated	**28.58**	**13.58**	**2.29**	**2.29**
SCAQMD Localized Screening Threshold (adjusted for 5 acres at 40 meters)	*173.40*	*1,541.60*	*7.20*	*2.43*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**

NO_X = Nitrogen Oxides; CO = Carbon Monoxide; PM_{10} = Particulate Matter 10 microns in diameter or less; $PM_{2.5}$ = Particulate Matter 2.5 microns in diameter or less

1. Includes all area sources emissions and energy emissions.
2. **MM AQ-5** through **MM AQ-7** would reduce on-site emissions by prohibiting fireplaces, requiring zero emission landscape equipment, and requiring low VOC paint.

Source: CalEEMod version 2022. Refer to Appendix A for model outputs.

Criteria Pollutant Health Impacts

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502). The SCAQMD has set its CEQA significance thresholds based on the FCAA, which defines a major stationary source (in extreme O_3 nonattainment areas such as the SCAB) as emitting 10 tons per year. The thresholds correlate with the trigger levels for the federal New Source Review (NSR) Program and SCAQMD Rule 1303 for new or modified sources. The NSR Program[5] was created by the FCAA to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based federal ambient air quality standards. The federal ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area.[6] Therefore, projects that do not exceed the SCAQMD's LSTs would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts.

NO_X and ROG are precursor emissions that form O_3 in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so O_3 may be formed at a distance downwind from the sources. Breathing ground-level O_3 can result health effects that include reduced lung function, inflammation of

5 Code of Federal Regulation (CFR) [i.e. PSD (40 CFR 52.21, 40 CFR 51.166, 40 CFR 51.165 (b)), Non-attainment NSR (40 CFR 52.24, 40 CFR 51.165, 40 CFR part 51, Appendix S)

6 South Coast AQMD, *Final Localized Significance Threshold Methodology*. July 2008. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2

airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily O_3 concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that O_3 can make asthma symptoms worse and can increase sensitivity to asthma triggers.

The SCAQMD's 2022 AQMP focuses on the 2015 8-hour ozone standard with achieving attainment in 2037. The largest source of NO_X emissions (an O_3 precursor) in 2018 were related to on-road sources. The 2022 AQMP also emphasizes a shift in focus beyond on-road emissions to off-road sources. The 2022 AQMP identifies a 67 percent NO_X reduction beyond what we would achieve through current programs by 2037 and about 83 percent below current levels. In order to achieve this, the SCAQMD identifies the need for widespread adoption of zero emissions (ZE) technologies across all mobile sectors and stationary sources.

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 NO_X technologies and (2) developing new ZE and ultra-low NO_X technologies for use in cases where the technology is not currently available. SCAQMD will prioritize distribution of incentive funding in EJ areas and seek opportunities to focus benefits on the most disadvantaged communities. The 2022 AQMP includes a total of 49 control measures. In addition to the NO_X measures, the 2022 AQMP relies on co-benefits from climate and energy efficiency programs for further reductions, limited strategic measures for VOC reductions, and other actions.

The SCAQMD's air quality modeling demonstrates that NO_X reductions prove to be much more effective in reducing O_3 levels and will also lead to significant improvement in $PM_{2.5}$ concentrations. NO_X-emitting stationary sources regulated by the SCAQMD include Regional Clean Air Incentives Market (RECLAIM) facilities (e.g., refineries, power plants, etc.), natural gas combustion equipment (e.g., boilers, heaters, engines, burners, flares) and other combustion sources that burn wood or propane.

There are significant challenges with correlating specific health effects that will occur as a result of a project's significant criteria air pollutant emissions. Generally, models that correlate criteria air pollutant concentrations with specific health effects focus on regulatory decision-making that will apply throughout an entire air basin or region. These models focus on the region-wide health effects of pollutants so that regulators can assess the costs and benefits of adopting a proposed regulation that applies to an entire category of air pollutant sources, rather than the health effects related to emissions from a specific proposed project or source. Because of the scale of these analyses, any one project is likely to have only very small incremental effects which may be difficult to differentiate from the effects of air pollutant concentrations in an entire air basin. Furthermore, the modeling efforts, while costly to produce, may not be particularly useful. For regional pollutants, it is difficult to trace a particular project's criteria air pollutant emissions to a specific health effect. Moreover, the modeled results may be misleading because the margin of error in modeling for specific health effects is large enough that, even if the modeled results report a given health effect, the model is sufficiently imprecise that the actual effect may differ from the reported results; that is, the modeled results suggest precision, when in fact available models cannot be that precise on a project level.

As discussed above, the mass emissions thresholds developed by SCAQMD and used by CEQA lead agencies throughout southern California to determine potential significance of project-related regional

changes in the environment are not directly indicative of exceedances of applicable ambient air standards. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O_3 or PM. The effects on ground-level ambient concentrations of pollutants that may be breathed by people are also influenced by the spatial and temporal patterns of the emission sources. In other words, the effect on O_3 and PM concentrations from a given mass of pollutants emitted in one location may vary from the effect if that same mass of pollutants was emitted in an entirely different location in the SCAB. The same effect may be observed when the daily and seasonal variation of emissions is taken into account. Regional-scale photochemical modeling, typically performed only for NAAQS attainment demonstration and rule promulgation, account for these changes in the spatial, temporal, and chemical nature of regional emissions.

Emissions from the construction and operation of the proposed Project would vary by time of day, month, and season, and the majority of Project-related emissions, being generated by mobile sources driving to and from the site, would be emitted throughout a wide area defined by the origins and destinations of people travelling to and from the proposed Project. As SCAQMD has stated "it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region."[7]

Specifically, for extremely large regional projects, the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds per day of NO_X and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to O_3. Based on its recent experiences applying regional scale models to relatively small increase in emissions, SCAQMD stated in its Amicus Brief in the Sierra Club v. County of Fresno case: "[A] project emitting only 10 tons per year of NO_X or VOC is small enough that its regional impact on ambient ozone levels may not be detected in the regional air quality models that are currently used to determine ozone levels."[8] The Brief makes it clear that SCAQMD does not believe that there must be a quantification of a project's health risks in CEQA documents prepared for individual projects. Any attempt to quantify the proposed Project's health risks would be considered unreliable and misleading. Also, the Project does not generate anywhere near 6,620 pounds per day of NO_X or 89,190 pounds per day of ROG (VOC) emissions, which SCAQMD stated was a large enough emission to quantify O_3-related health impacts. Therefore, the Project's emissions are not sufficiently high enough to use regional modeling program to correlate health effects on a basin-wide level.

As previously discussed, localized effects of on-site Project emissions on nearby receptors for the Project would be less than significant (refer to **Table 23** through **Table 29**. The LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable State or federal ambient air quality standard. The LSTs were developed by the SCAQMD based on the ambient concentrations of that pollutant for each SRA and distance to the nearest sensitive receptor. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations. However, as discussed above, neither the SCAQMD nor any other air district currently have methodologies that would provide Lead Agencies and CEQA practitioners with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project's mass emissions. Information on health impacts related to exposure to ozone and particulate matter emissions

[7] South Coast Air Quality Management District, *Amicus Brief in Support of Neither Party, Sierra Club v. County of Fresno*, 2015.
[8] Ibid.

published by the U.S. EPA and CARB have been summarized above and discussed in the Regulatory Framework section. Health studies are used by these agencies to set the NAAQS and CAAQS.

Although it may be misleading and unreliable to attempt to specifically and numerically quantify the Project's health risks, this analysis provides extensive information concerning the Project's potential health risks. While the Project is expected to exceed the SCAQMD's numeric regional mass daily thresholds for ROG and NO_X, this does not in itself constitute a significant health impact to the population on and adjacent to the project site and within the SCAB. The reason for this is that the mass daily thresholds are in pounds per day emitted into the air whereas health effects are determined based on the concentration of emissions in the air at particular receptor (e.g., parts per million by volume of air, or micrograms per cubic meter of air).

The NAAQS and CAAQS were developed to protect the most susceptible population groups from adverse health effects and were established in terms of parts per million or micrograms per cubic meter for the applicable emissions. As stated earlier, the mass emission thresholds were established primarily in conjunction with federal permitting "major source" thresholds. If emissions were below these "de minimis" emission rates, then the proposed Project is presumed to conform with the NAAQS.[9] While based on the status of an air basin level of attainment of the health-based NAAQS, emissions in excess of the mass emission thresholds from one project does not mean the air basin would experience measurably higher ground level concentrations, or more frequent occurrences of ground level concentrations in exceedance of standards, or delay timely attainment of a particular NAAQS.

Ozone concentrations are dependent upon a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the NAAQS and CAAQS, none of the health-related information can be directly correlated to the pounds/day or tons/year of emissions estimated from a single, proposed project. Therefore, it is impossible to correlate significant criteria pollutants from an individual project to health risk. **Table 3** includes a list of criteria pollutants and summarizes common sources and effects. Thus, this analysis is reasonable and intended to foster informed decision making. Due to the uncertainty in the relationship between project-level mass emissions and regional ozone formation as well as limitations with currently available technical tools, the resulting health effects associated with the Project cannot be identified. Given this is speculative, no meaningful conclusion can be drawn with respect to potential health effects from the criteria pollutant emissions of the proposed Project.

Carbon Monoxide Hotspots

An analysis of CO "hot spots" is needed to determine whether the change in the level of service of an intersection resulting from the Project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard.

[9] U.S. Environmental Protection Agency. Frequent Questions about General Conformity. Available: https://www.epa.gov/general-conformity/frequent-questions-about-general-conformity. Accessed January 2023.

The SCAB was re-designated as attainment for CO in 2007 and is no longer addressed in the SCAQMD's AQMP. The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the SCAQMD *CO Hotspot Analysis*, the Wilshire Boulevard and Veteran Avenue intersection, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm federal standard. The Project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD's *CO Hotspot Analysis*. As the CO hotspots were not experienced at the Wilshire Boulevard and Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any vicinity intersections resulting from 22,818 additional vehicle trips attributable to the Project and distributed throughout the roadway network. Therefore, impacts would be less than significant.

Mitigation Measures: MM AQ-1 through **MM AQ-7** are required.

Level of Significance: Less than significant impact with mitigation incorporated. The City of Santa Ana General Plan Update Program EIR found construction and operation emissions generated by individual development projects have the potential to result in a significant impact. In certifying the General Plan Update Program EIR and approving the General Plan project, the City Council approved a Statement of Overriding Considerations, which notes that there are specific economic, social, and other public benefits that outweigh the significant unavoidable impacts associated with the General Plan project. The General Plan EIR acknowledges that individual projects accommodated under the General Plan Update may not exceed the SCAQMD thresholds and could have less than significant impacts. The analysis above demonstrates that the Project's localized construction and operational would be less than significant with mitigation. Therefore, the impacts identified in this analysis with respect to localized emissions would be less than what was anticipated in the General Plan Findings of Fact and Statement of Overriding Considerations.

Threshold 5.4 Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction

Odors that could be generated by construction activities are required to follow SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, 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.*

During construction, emissions from construction equipment, such as diesel exhaust, and volatile organic compounds from architectural coatings and paving activities may generate odors. However, these odors would be temporary, are not expected to affect a substantial number of people, and would disperse rapidly because equipment exhaust is intermittent and moves around on a project site. Nuisances caused by construction odors or other sources are controlled by SCAQMD Rule 402. As discussed in the General Plan EIR, any construction-related odor emissions would be temporary and intermittent and noxious odors would be confined to the immediate vicinity of the construction equipment in use. By the time such emissions reached any sensitive receptor sites, they would be diluted to well below any level of air quality

concern. Therefore, impacts related to odors associated with the Project's construction-related activities would be less than significant.

Operations

The SCAQMD *CEQA Air Quality Handbook* identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, the Project would not create objectionable odors.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact. The City of Santa Ana General Plan Update Program EIR found that odor impacts would be less than significant. Therefore, the impacts identified in this analysis with respect to odors would be the same as what was anticipated in the General Plan Update Program EIR.

6 REFERENCES

1. California Air Pollution Control Officers Association (CAPCOA), *Health Effects*, 2018.
2. California Air Pollution Control Officers Association (CAPCOA), *Health Risk Assessments for Proposed Land Use Projects*, 2009.
3. California Air Resources Board, *Aerometric Data Analysis and Measurement System (ADAM) Top Four Summaries from 2015 to 2017*, 2019.
4. California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, 2005.
5. California Air Resources Board, *Current Air Quality Standards*, 2016.
6. California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, 2000.
7. City of Santa Ana, *City of Santa Ana General Plan*, April 2022.
8. Federal Highway Administration*, Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents,* 2016.
9. Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, 2015.
10. Ralph Propper, Patrick Wong, Son Bui, Jeff Austin, William Vance, Alvaro Alvarado, Bart Croes, and Dongmin Luo, *Ambient and Emission Trends of Toxic Air Contaminants in California. American Chemical Society: Environmental Science & Technology,* 2015.
11. Southern California Association of Governments, *2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)*, 2020.
12. Linscott Law & Greenspan Engineers, *Traffic Circulation Analysis Scope of Work for Related Bristol Project*, 2022.
13. South Coast Air Quality Management District, *2016 Air Quality Management Plan,* March 2017.
14. South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993.
15. South Coast Air Quality Management District, *Localized Significance Threshold Methodology*, 2009.
16. South Coast Air Quality Management District, *The Multiple Air Toxics Exposure Study IV,* 2015.
17. United States Environmental Protection Agency, *National Ambient Air Quality Standards Table*, 2016.
18. United States Environmental Protection Agency, *Nonattainment Areas for Criteria Pollutants*, 2019.
19. United States Environmental Protection Agency, *Policy Assessment for the Review of the Lead National Ambient Air Quality Standards*, 2013.

Appendix A

Air Quality Modeling Data

Bristol Phase 1 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bristol Phase 1
Construction Start Date	1/1/2026
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	33.697094661824195, -117.8872992391776
County	Orange
City	Santa Ana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5946
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.8

1.2. Land Use Types

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

Apartments Mid Rise	1,375	Dwelling Unit	7.60	1,513,074	—	—	4,098	—
Retirement Community	200	Dwelling Unit	1.13	225,000	—	—	596	—
Regional Shopping Center	250	1000sqft	1.26	250,000	—	—	—	—
Enclosed Parking with Elevator	1,406	1000sqft	7.06	1,405,500	—	—	—	—
Other Asphalt Surfaces	285	1000sqft	0.09	0.00	—	—	—	—
City Park	1.72	Acre	1.72	0.00	75,000	75,000	—	—
Hotel	250	Room	0.75	363,000	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Construction	C-12	Sweep Paved Roads
Construction	C-13	Use Low-VOC Paints for Construction
Transportation	T-1	Increase Residential Density
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-31-A*	Locate Project in Area with High Destination Accessibility
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Energy	E-2	Require Energy Efficient Appliances
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

* 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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.2	20.4	313	286	1.21	8.33	59.7	61.9	7.79	14.4	19.2	—	165,336	165,336	11.1	20.1	256	171,858
Mit.	16.6	12.9	158	240	0.96	1.85	59.7	60.2	1.85	14.4	14.8	—	138,941	138,941	10.0	19.9	256	145,373
% Reduced	51%	37%	49%	16%	20%	78%	—	3%	76%	—	23%	—	16%	16%	10%	1%	—	15%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.5	131	175	272	0.46	7.46	59.7	62.2	6.86	14.4	16.7	—	94,212	94,212	3.76	6.39	6.69	96,194
Mit.	17.0	24.3	56.8	226	0.33	0.62	59.7	60.2	0.62	14.4	14.8	—	85,039	85,039	3.20	6.32	6.69	86,989
% Reduced	28%	82%	68%	17%	29%	92%	—	3%	91%	—	11%	—	10%	10%	15%	1%	—	10%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.9	26.5	147	190	0.46	4.43	42.2	43.7	4.11	10.1	11.6	—	69,638	69,638	3.85	6.77	71.7	71,803
Mit.	11.8	9.13	57.4	158	0.34	0.64	42.2	42.6	0.64	10.1	10.5	—	60,205	60,205	3.31	6.66	71.7	61,615
% Reduced	37%	66%	61%	17%	27%	85%	—	3%	84%	—	10%	—	14%	14%	14%	2%	—	14%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.44	4.83	26.9	34.7	0.08	0.81	7.71	7.98	0.75	1.85	2.12	—	11,529	11,529	0.64	1.12	11.9	11,888
Mit.	2.16	1.67	10.5	28.8	0.06	0.12	7.71	7.77	0.12	1.85	1.91	—	9,968	9,968	0.55	1.10	11.9	10,201

% Reduced	37%	66%	61%	17%	27%	85%	—	3%	84%	—	10%	—	14%	14%	14%	2%	—	14%

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	34.2	20.4	313	236	1.21	8.33	38.9	47.2	7.79	11.4	19.2	—	165,336	165,336	11.1	20.1	256	171,858
2027	22.8	18.0	98.7	286	0.36	2.24	59.7	61.9	2.08	14.4	16.4	—	95,221	95,221	2.66	6.17	232	97,357
2028	22.0	17.4	93.0	275	0.36	2.03	59.7	61.7	1.88	14.4	16.2	—	93,617	93,617	2.62	4.57	208	95,252
2029	4.99	4.43	38.9	62.1	0.08	1.43	0.78	2.22	1.32	0.18	1.50	—	9,805	9,805	0.38	0.08	1.94	9,840
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	23.5	20.2	175	272	0.46	7.46	59.7	62.2	6.86	14.4	16.7	—	94,212	94,212	3.76	6.39	6.69	96,194
2027	22.8	17.9	100	260	0.36	2.24	59.7	61.9	2.08	14.4	16.4	—	92,818	92,818	2.73	6.17	6.04	94,730
2028	21.9	17.3	96.1	249	0.36	2.03	59.7	61.7	1.88	14.4	16.2	—	91,260	91,260	2.73	6.17	5.39	93,171
2029	21.2	131	91.1	239	0.36	1.88	59.7	61.6	1.75	14.4	16.1	—	89,673	89,673	2.62	6.17	4.80	91,581
2030	3.08	131	6.72	34.5	0.01	0.07	10.2	10.3	0.06	2.40	2.46	—	9,864	9,864	0.14	0.06	0.58	9,885
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	18.9	13.6	147	154	0.46	4.43	24.9	29.3	4.11	6.87	11.0	—	69,638	69,638	3.85	6.77	50.9	71,803
2027	16.3	12.8	72.9	190	0.26	1.60	42.1	43.7	1.49	10.1	11.6	—	66,757	66,757	1.95	4.40	71.7	68,190
2028	15.7	12.5	68.8	184	0.26	1.45	42.2	43.7	1.35	10.1	11.5	—	65,816	65,816	1.95	4.42	64.4	67,246
2029	3.93	26.5	22.9	47.5	0.06	0.73	5.72	6.44	0.67	1.36	2.03	—	11,375	11,375	0.34	0.48	7.17	11,535
2030	0.53	22.6	1.16	6.19	< 0.005	0.01	1.74	1.75	0.01	0.41	0.42	—	1,720	1,720	0.02	0.01	1.66	1,725
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	3.44	2.48	26.9	28.1	0.08	0.81	4.55	5.36	0.75	1.25	2.00	—	11,529	11,529	0.64	1.12	8.43	11,888
2027	2.97	2.33	13.3	34.7	0.05	0.29	7.69	7.98	0.27	1.85	2.12	—	11,052	11,052	0.32	0.73	11.9	11,290
2028	2.87	2.28	12.6	33.5	0.05	0.26	7.71	7.97	0.25	1.85	2.10	—	10,897	10,897	0.32	0.73	10.7	11,133
2029	0.72	4.83	4.19	8.66	0.01	0.13	1.04	1.18	0.12	0.25	0.37	—	1,883	1,883	0.06	0.08	1.19	1,910
2030	0.10	4.12	0.21	1.13	< 0.005	< 0.005	0.32	0.32	< 0.005	0.07	0.08	—	285	285	< 0.005	< 0.005	0.27	286

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	13.8	3.43	158	141	0.96	1.85	38.9	40.7	1.85	11.4	13.2	—	138,941	138,941	10.0	19.9	256	145,373
2027	16.6	12.9	51.2	240	0.28	0.50	59.7	60.2	0.48	14.4	14.8	—	86,048	86,048	2.29	6.09	232	88,153
2028	16.1	12.5	48.2	229	0.28	0.50	59.7	60.2	0.48	14.4	14.8	—	84,442	84,442	2.25	4.50	208	86,046
2029	0.51	0.71	4.02	23.8	0.03	0.06	0.78	0.84	0.06	0.18	0.24	—	3,763	3,763	0.13	0.03	1.94	3,777
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	17.0	14.9	56.8	226	0.33	0.62	59.7	60.2	0.62	14.4	14.8	—	85,039	85,039	3.20	6.32	6.69	86,989
2027	16.6	12.8	52.7	214	0.28	0.50	59.7	60.2	0.48	14.4	14.8	—	83,645	83,645	2.36	6.09	6.04	85,525
2028	15.9	12.4	51.3	204	0.28	0.50	59.7	60.2	0.48	14.4	14.8	—	82,086	82,086	2.36	6.09	5.39	83,966
2029	15.5	24.3	48.3	194	0.28	0.49	59.7	60.2	0.48	14.4	14.8	—	80,501	80,501	2.25	6.09	4.80	82,378
2030	2.41	24.2	3.30	29.8	< 0.005	< 0.005	10.2	10.2	< 0.005	2.40	2.40	—	9,330	9,330	0.11	0.05	0.58	9,349
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	7.14	3.86	57.4	93.3	0.34	0.64	24.9	25.6	0.64	6.87	7.51	—	56,272	56,272	3.31	6.66	50.9	58,391
2027	11.8	9.13	38.9	158	0.20	0.36	42.1	42.5	0.35	10.1	10.5	—	60,205	60,205	1.68	4.35	71.7	61,615
2028	11.5	8.97	36.7	151	0.20	0.36	42.2	42.6	0.35	10.1	10.5	—	59,245	59,245	1.69	4.36	64.4	60,652

2029	1.59	5.38	5.20	27.9	0.03	0.05	5.72	5.77	0.05	1.36	1.41	—	8,206	8,206	0.21	0.46	7.17	8,355
2030	0.41	4.17	0.57	5.38	< 0.005	< 0.005	1.74	1.74	< 0.005	0.41	0.41	—	1,628	1,628	0.02	0.01	1.66	1,633
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.30	0.71	10.5	17.0	0.06	0.12	4.55	4.67	0.12	1.25	1.37	—	9,316	9,316	0.55	1.10	8.43	9,667
2027	2.16	1.67	7.10	28.8	0.04	0.07	7.69	7.75	0.06	1.85	1.91	—	9,968	9,968	0.28	0.72	11.9	10,201
2028	2.10	1.64	6.70	27.5	0.04	0.06	7.71	7.77	0.06	1.85	1.91	—	9,809	9,809	0.28	0.72	10.7	10,042
2029	0.29	0.98	0.95	5.09	0.01	0.01	1.04	1.05	0.01	0.25	0.26	—	1,359	1,359	0.03	0.08	1.19	1,383
2030	0.08	0.76	0.10	0.98	< 0.005	< 0.005	0.32	0.32	< 0.005	0.07	0.07	—	270	270	< 0.005	< 0.005	0.27	270

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	72.9	122	34.3	477	0.81	1.18	29.6	30.7	1.20	5.24	6.44	1,218	114,865	116,083	129	3.82	752	121,185
Mit.	42.5	90.4	28.3	252	0.67	0.91	24.5	25.4	0.89	4.34	5.23	1,218	98,648	99,865	128	3.30	723	104,765
% Reduced	42%	26%	18%	47%	17%	23%	17%	17%	26%	17%	19%	—	14%	14%	1%	14%	4%	14%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	48.9	100.0	34.9	286	0.77	1.03	29.6	30.6	1.01	5.24	6.24	1,218	111,385	112,602	129	3.96	587	117,586
Mit.	42.4	90.2	30.1	242	0.64	0.91	24.5	25.4	0.89	4.34	5.23	1,218	96,116	97,334	128	3.42	586	102,137
% Reduced	13%	10%	14%	15%	16%	12%	17%	17%	11%	17%	16%	—	14%	14%	1%	14%	< 0.5%	13%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	64.6	115	35.7	408	0.77	1.13	28.8	30.0	1.13	5.11	6.24	1,218	110,808	112,026	129	3.91	654	117,060

Mit.	41.8	89.7	29.8	241	0.63	0.91	23.8	24.7	0.88	4.21	5.10	1,218	95,135	96,353	128	3.37	641	101,194
% Reduced	35%	22%	16%	41%	17%	20%	17%	18%	22%	17%	18%	—	14%	14%	1%	14%	2%	14%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.8	20.9	6.51	74.4	0.14	0.21	5.26	5.47	0.21	0.93	1.14	202	18,346	18,547	21.3	0.65	108	19,381
Mit.	7.63	16.4	5.44	44.0	0.12	0.17	4.34	4.51	0.16	0.77	0.93	202	15,751	15,952	21.2	0.56	106	16,754
% Reduced	35%	22%	16%	41%	17%	20%	17%	18%	22%	17%	18%	—	14%	14%	1%	14%	2%	14%

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	48.2	44.8	24.9	295	0.75	0.41	29.6	30.0	0.38	5.24	5.62	—	76,629	76,629	3.81	3.19	170	77,845
Area	23.8	77.1	1.57	177	0.01	0.15	—	0.15	0.20	—	0.20	0.00	600	600	0.03	0.01	—	602
Energy	0.90	0.45	7.90	4.69	0.05	0.62	—	0.62	0.62	—	0.62	—	36,787	36,787	2.54	0.22	—	36,916
Water	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543
Waste	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Total	72.9	122	34.3	477	0.81	1.18	29.6	30.7	1.20	5.24	6.44	1,218	114,865	116,083	129	3.82	752	121,185
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	48.0	44.6	27.0	281	0.72	0.41	29.6	30.0	0.38	5.24	5.62	—	73,748	73,748	4.00	3.34	4.40	74,847
Area	0.00	54.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.90	0.45	7.90	4.69	0.05	0.62	—	0.62	0.62	—	0.62	—	36,787	36,787	2.54	0.22	—	36,916
Water	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543

Waste	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Total	48.9	100.0	34.9	286	0.77	1.03	29.6	30.6	1.01	5.24	6.24	1,218	111,385	112,602	129	3.96	587	117,586
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	47.4	44.0	26.7	281	0.71	0.40	28.8	29.2	0.38	5.11	5.48	—	72,761	72,761	3.92	3.28	71.4	73,909
Area	16.3	70.1	1.08	122	0.01	0.10	—	0.10	0.13	—	0.13	0.00	411	411	0.02	< 0.005	—	412
Energy	0.90	0.45	7.90	4.69	0.05	0.62	—	0.62	0.62	—	0.62	—	36,787	36,787	2.54	0.22	—	36,916
Water	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543
Waste	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Total	64.6	115	35.7	408	0.77	1.13	28.8	30.0	1.13	5.11	6.24	1,218	110,808	112,026	129	3.91	654	117,060
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.65	8.03	4.87	51.3	0.13	0.07	5.26	5.33	0.07	0.93	1.00	—	12,046	12,046	0.65	0.54	11.8	12,236
Area	2.97	12.8	0.20	22.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	68.0	68.0	< 0.005	< 0.005	—	68.3
Energy	0.16	0.08	1.44	0.86	0.01	0.11	—	0.11	0.11	—	0.11	—	6,090	6,090	0.42	0.04	—	6,112
Water	—	—	—	—	—	—	—	—	—	—	—	26.6	141	167	2.74	0.07	—	255
Waste	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	612
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96.4	96.4
Total	11.8	20.9	6.51	74.4	0.14	0.21	5.26	5.47	0.21	0.93	1.14	202	18,346	18,547	21.3	0.65	108	19,381

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.7	38.9	21.0	248	0.62	0.34	24.5	24.8	0.32	4.34	4.66	—	63,643	63,643	3.24	2.69	141	64,667

Area	0.00	51.1	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.83	0.41	7.25	4.37	0.05	0.57	—	0.57	0.57	—	0.57	—	34,155	34,155	2.36	0.21	—	34,275
Water	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543
Waste	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Total	42.5	90.4	28.3	252	0.67	0.91	24.5	25.4	0.89	4.34	5.23	1,218	98,648	99,865	128	3.30	723	104,765
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.5	38.6	22.8	237	0.60	0.34	24.5	24.8	0.32	4.34	4.66	—	61,257	61,257	3.41	2.82	3.64	62,185
Area	0.00	51.1	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.83	0.41	7.25	4.37	0.05	0.57	—	0.57	0.57	—	0.57	—	34,010	34,010	2.35	0.21	—	34,130
Water	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543
Waste	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Total	42.4	90.2	30.1	242	0.64	0.91	24.5	25.4	0.89	4.34	5.23	1,218	96,116	97,334	128	3.42	586	102,137
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.0	38.1	22.5	237	0.59	0.34	23.8	24.1	0.31	4.21	4.53	—	60,176	60,176	3.34	2.76	58.9	61,142
Area	0.00	51.1	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.83	0.41	7.25	4.37	0.05	0.57	—	0.57	0.57	—	0.57	—	34,109	34,109	2.35	0.21	—	34,229
Water	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543
Waste	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Total	41.8	89.7	29.8	241	0.63	0.91	23.8	24.7	0.88	4.21	5.10	1,218	95,135	96,353	128	3.37	641	101,194
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.48	6.96	4.11	43.2	0.11	0.06	4.34	4.40	0.06	0.77	0.83	—	9,963	9,963	0.55	0.46	9.76	10,123
Area	0.00	9.33	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.15	0.08	1.32	0.80	0.01	0.10	—	0.10	0.10	—	0.10	—	5,647	5,647	0.39	0.03	—	5,667

Water	—	—	—	—	—	—	—	—	—	—	—	26.6	141	167	2.74	0.07	—	255
Waste	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	612
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96.4	96.4
Total	7.63	16.4	5.44	44.0	0.12	0.17	4.34	4.51	0.16	0.77	0.93	202	15,751	15,952	21.2	0.56	106	16,754

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	16.3	13.7	124	114	0.20	5.06	—	5.06	4.65	—	4.65	—	20,560	20,560	0.83	0.17	—	20,630
Demolition	—	—	—	—	—	—	15.5	15.5	—	2.35	2.35	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.88	1.58	14.3	13.1	0.02	0.58	—	0.58	0.54	—	0.54	—	2,366	2,366	0.10	0.02	—	2,374
Demolition	—	—	—	—	—	—	1.79	1.79	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.60	2.39	< 0.005	0.11	—	0.11	0.10	—	0.10	—	392	392	0.02	< 0.005	—	393
Demolition	—	—	—	—	—	—	0.33	0.33	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.20	0.21	2.73	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	744	744	0.01	0.03	0.07	752
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	3.73	0.55	47.6	20.5	0.26	0.50	10.2	10.7	0.50	2.85	3.35	—	38,516	38,516	2.91	6.09	2.02	40,407
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.33	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.7	86.7	< 0.005	< 0.005	0.13	87.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.43	0.06	5.54	2.35	0.03	0.06	1.16	1.22	0.06	0.33	0.38	—	4,431	4,431	0.34	0.70	3.87	4,652
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.4	14.4	< 0.005	< 0.005	0.02	14.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	0.01	1.01	0.43	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	734	734	0.06	0.12	0.64	770

3.2. Demolition (2026) - Mitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	9.01	36.3	0.07	0.13	—	0.13	0.13	—	0.13	—	6,853	6,853	0.28	0.06	—	6,877
Demolition	—	—	—	—	—	—	15.5	15.5	—	2.35	2.35	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	1.04	4.18	0.01	0.01	—	0.01	0.01	—	0.01	—	789	789	0.03	0.01	—	791
Demolition	—	—	—	—	—	—	1.79	1.79	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.19	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	131	131	0.01	< 0.005	—	131
Demolition	—	—	—	—	—	—	0.33	0.33	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.20	0.21	2.73	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	744	744	0.01	0.03	0.07	752
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	3.73	0.55	47.6	20.5	0.26	0.50	10.2	10.7	0.50	2.85	3.35	—	38,516	38,516	2.91	6.09	2.02	40,407
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.33	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.7	86.7	< 0.005	< 0.005	0.13	87.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.43	0.06	5.54	2.35	0.03	0.06	1.16	1.22	0.06	0.33	0.38	—	4,431	4,431	0.34	0.70	3.87	4,652
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.4	14.4	< 0.005	< 0.005	0.02	14.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	0.01	1.01	0.43	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	734	734	0.06	0.12	0.64	770

3.3. Site Preparation (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	22.4	18.9	175	173	0.29	7.46	—	7.46	6.86	—	6.86	—	31,788	31,788	1.29	0.26	—	31,897
Dust From Material Movement	—	—	—	—	—	—	10.2	10.2	—	5.25	5.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	22.4	18.9	175	173	0.29	7.46	—	7.46	6.86	—	6.86	—	31,788	31,788	1.29	0.26	—	31,897
Dust From Material Movement	—	—	—	—	—	—	10.2	10.2	—	5.25	5.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.00	3.36	31.2	30.8	0.05	1.33	—	1.33	1.22	—	1.22	—	5,661	5,661	0.23	0.05	—	5,680
Dust From Material Movement	—	—	—	—	—	—	1.82	1.82	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.69	5.62	0.01	0.24	—	0.24	0.22	—	0.22	—	937	937	0.04	0.01	—	940
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.24	0.21	3.69	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	912	912	0.01	0.03	3.17	925

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.24	0.24	3.18	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	867	867	0.01	0.03	0.08	878
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.59	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	157	157	< 0.005	0.01	0.24	159
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.9	25.9	< 0.005	< 0.005	0.04	26.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	1.00	5.18	56.6	0.10	0.20	—	0.20	0.20	—	0.20	—	10,596	10,596	0.43	0.09	—	10,632

Dust From Material Movement	—	—	—	—	—	—	10.2	10.2	—	5.25	5.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	1.00	5.18	56.6	0.10	0.20	—	0.20	0.20	—	0.20	—	10,596	10,596	0.43	0.09	—	10,632
Dust From Material Movement	—	—	—	—	—	—	10.2	10.2	—	5.25	5.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	0.92	10.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,887	1,887	0.08	0.02	—	1,893
Dust From Material Movement	—	—	—	—	—	—	1.82	1.82	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.17	1.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	312	312	0.01	< 0.005	—	313
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.24	0.21	3.69	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	912	912	0.01	0.03	3.17	925
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.24	0.24	3.18	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	867	867	0.01	0.03	0.08	878
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.59	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	157	157	< 0.005	0.01	0.24	159
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.9	25.9	< 0.005	< 0.005	0.04	26.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

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

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

Off-Road Equipment	21.7	18.3	163	165	0.37	6.73	—	6.73	6.19	—	6.19	—	39,591	39,591	1.61	0.32	—	39,727
Dust From Material Movement	—	—	—	—	—	—	4.89	4.89	—	1.92	1.92	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.24	4.40	39.4	39.9	0.09	1.62	—	1.62	1.49	—	1.49	—	9,545	9,545	0.39	0.08	—	9,578
Dust From Material Movement	—	—	—	—	—	—	1.18	1.18	—	0.46	0.46	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	7.19	7.28	0.02	0.30	—	0.30	0.27	—	0.27	—	1,580	1,580	0.06	0.01	—	1,586
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.24	4.22	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,042	1,042	0.01	0.04	3.62	1,057

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	12.2	1.89	149	65.9	0.84	1.60	32.9	34.5	1.60	9.24	10.8	—	124,702	124,702	9.47	19.7	252	131,074
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	242	242	< 0.005	0.01	0.38	245
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	2.93	0.44	37.6	15.9	0.20	0.39	7.86	8.25	0.39	2.21	2.59	—	30,070	30,070	2.28	4.76	26.3	31,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	40.1	40.1	< 0.005	< 0.005	0.06	40.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.53	0.08	6.86	2.91	0.04	0.07	1.43	1.51	0.07	0.40	0.47	—	4,978	4,978	0.38	0.79	4.35	5,227

3.6. Grading (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.28	8.85	70.7	0.12	0.25	—	0.25	0.25	—	0.25	—	13,197	13,197	0.54	0.11	—	13,242
Dust From Material Movement	—	—	—	—	—	—	4.89	4.89	—	1.92	1.92	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.31	2.13	17.0	0.03	0.06	—	0.06	0.06	—	0.06	—	3,182	3,182	0.13	0.03	—	3,193
Dust From Material Movement	—	—	—	—	—	—	1.18	1.18	—	0.46	0.46	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.39	3.11	0.01	0.01	—	0.01	0.01	—	0.01	—	527	527	0.02	< 0.005	—	529
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.24	4.22	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,042	1,042	0.01	0.04	3.62	1,057
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	12.2	1.89	149	65.9	0.84	1.60	32.9	34.5	1.60	9.24	10.8	—	124,702	124,702	9.47	19.7	252	131,074
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.06	0.07	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	242	242	< 0.005	0.01	0.38	245
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	2.93	0.44	37.6	15.9	0.20	0.39	7.86	8.25	0.39	2.21	2.59	—	30,070	30,070	2.28	4.76	26.3	31,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	40.1	40.1	< 0.005	< 0.005	0.06	40.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.53	0.08	6.86	2.91	0.04	0.07	1.43	1.51	0.07	0.40	0.47	—	4,978	4,978	0.38	0.79	4.35	5,227

3.7. Building Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.68	6.43	59.1	77.8	0.14	2.27	—	2.27	2.09	—	2.09	—	14,383	14,383	0.58	0.12	—	14,433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	10.6	14.0	0.03	0.41	—	0.41	0.38	—	0.38	—	2,590	2,590	0.11	0.02	—	2,598
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.94	2.56	< 0.005	0.07	—	0.07	0.07	—	0.07	—	429	429	0.02	< 0.005	—	430

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.5	13.2	13.7	178	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	48,499	48,499	0.69	1.85	4.59	49,074
Vendor	2.41	0.62	33.2	16.3	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	31,330	31,330	1.56	4.42	2.10	32,688
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.42	2.36	2.46	33.3	0.00	0.00	9.09	9.09	0.00	2.13	2.13	—	8,851	8,851	0.12	0.33	13.8	8,968
Vendor	0.44	0.12	6.01	2.90	0.04	0.04	1.52	1.56	0.04	0.42	0.46	—	5,639	5,639	0.28	0.80	6.30	5,889
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.45	6.08	0.00	0.00	1.66	1.66	0.00	0.39	0.39	—	1,465	1,465	0.02	0.06	2.28	1,485
Vendor	0.08	0.02	1.10	0.53	0.01	0.01	0.28	0.29	0.01	0.08	0.08	—	934	934	0.05	0.13	1.04	975
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	0.00	0.00

3.8. Building Construction (2026) - Mitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	1.05	8.80	31.7	0.05	0.28	—	0.28	0.26	—	0.26	—	5,210	5,210	0.21	0.04	—	5,228
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.19	1.58	5.71	0.01	0.05	—	0.05	0.05	—	0.05	—	938	938	0.04	0.01	—	941
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	1.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	155	155	0.01	< 0.005	—	156
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.5	13.2	13.7	178	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	48,499	48,499	0.69	1.85	4.59	49,074
Vendor	2.41	0.62	33.2	16.3	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	31,330	31,330	1.56	4.42	2.10	32,688
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.42	2.36	2.46	33.3	0.00	0.00	9.09	9.09	0.00	2.13	2.13	—	8,851	8,851	0.12	0.33	13.8	8,968
Vendor	0.44	0.12	6.01	2.90	0.04	0.04	1.52	1.56	0.04	0.42	0.46	—	5,639	5,639	0.28	0.80	6.30	5,889
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	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.45	6.08	0.00	0.00	1.66	1.66	0.00	0.39	0.39	—	1,465	1,465	0.02	0.06	2.28	1,485
Vendor	0.08	0.02	1.10	0.53	0.01	0.01	0.28	0.29	0.01	0.08	0.08	—	934	934	0.05	0.13	1.04	975
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	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.38	6.18	56.3	77.6	0.14	2.02	—	2.02	1.86	—	1.86	—	14,382	14,382	0.58	0.12	—	14,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.38	6.18	56.3	77.6	0.14	2.02	—	2.02	1.86	—	1.86	—	14,382	14,382	0.58	0.12	—	14,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.27	4.41	40.2	55.4	0.10	1.44	—	1.44	1.33	—	1.33	—	10,273	10,273	0.42	0.08	—	10,308
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.81	7.35	10.1	0.02	0.26	—	0.26	0.24	—	0.24	—	1,701	1,701	0.07	0.01	—	1,707

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.0	11.2	11.7	194	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	50,103	50,103	0.52	1.85	159	50,827
Vendor	2.43	0.64	30.6	15.2	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	30,735	30,735	1.56	4.20	73.5	32,098
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.0	11.1	12.0	166	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	47,684	47,684	0.60	1.85	4.13	48,256
Vendor	2.41	0.62	31.9	15.6	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	30,752	30,752	1.54	4.20	1.90	32,042
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.24	7.92	9.64	124	0.00	0.00	36.1	36.1	0.00	8.45	8.45	—	34,525	34,525	0.43	1.32	49.1	34,980
Vendor	1.74	0.46	23.0	11.0	0.16	0.16	6.04	6.20	0.16	1.67	1.83	—	21,959	21,959	1.10	3.00	22.6	22,902
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.69	1.45	1.76	22.6	0.00	0.00	6.58	6.58	0.00	1.54	1.54	—	5,716	5,716	0.07	0.22	8.12	5,791
Vendor	0.32	0.08	4.19	2.00	0.03	0.03	1.10	1.13	0.03	0.30	0.33	—	3,636	3,636	0.18	0.50	3.75	3,792
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	0.00	0.00

3.10. Building Construction (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.17	1.05	8.78	31.7	0.05	0.27	—	0.27	0.26	—	0.26	—	5,210	5,210	0.21	0.04	—	5,227
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.17	1.05	8.78	31.7	0.05	0.27	—	0.27	0.26	—	0.26	—	5,210	5,210	0.21	0.04	—	5,227
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.75	6.27	22.7	0.04	0.20	—	0.20	0.19	—	0.19	—	3,721	3,721	0.15	0.03	—	3,734
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.14	1.14	4.14	0.01	0.04	—	0.04	0.03	—	0.03	—	616	616	0.02	< 0.005	—	618
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.0	11.2	11.7	194	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	50,103	50,103	0.52	1.85	159	50,827
Vendor	2.43	0.64	30.6	15.2	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	30,735	30,735	1.56	4.20	73.5	32,098
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	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.0	11.1	12.0	166	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	47,684	47,684	0.60	1.85	4.13	48,256
Vendor	2.41	0.62	31.9	15.6	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	30,752	30,752	1.54	4.20	1.90	32,042
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.24	7.92	9.64	124	0.00	0.00	36.1	36.1	0.00	8.45	8.45	—	34,525	34,525	0.43	1.32	49.1	34,980
Vendor	1.74	0.46	23.0	11.0	0.16	0.16	6.04	6.20	0.16	1.67	1.83	—	21,959	21,959	1.10	3.00	22.6	22,902
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.69	1.45	1.76	22.6	0.00	0.00	6.58	6.58	0.00	1.54	1.54	—	5,716	5,716	0.07	0.22	8.12	5,791
Vendor	0.32	0.08	4.19	2.00	0.03	0.03	1.10	1.13	0.03	0.30	0.33	—	3,636	3,636	0.18	0.50	3.75	3,792
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	0.00	0.00

3.11. Building Construction (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.11	5.95	53.5	77.6	0.14	1.80	—	1.80	1.66	—	1.66	—	14,385	14,385	0.58	0.12	—	14,434
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	7.11	5.95	53.5	77.6	0.14	1.80	—	1.80	1.66	—	1.66	—	14,385	14,385	0.58	0.12	—	14,434
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.09	4.26	38.4	55.6	0.10	1.29	—	1.29	1.19	—	1.19	—	10,303	10,303	0.42	0.08	—	10,338
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	7.00	10.1	0.02	0.24	—	0.24	0.22	—	0.22	—	1,706	1,706	0.07	0.01	—	1,712
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.7	10.8	10.1	183	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	49,209	49,209	0.52	0.26	142	49,441
Vendor	2.21	0.62	29.4	14.7	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	30,023	30,023	1.52	4.20	66.1	31,377
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.6	10.7	11.8	157	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	46,836	46,836	0.60	1.85	3.67	47,407
Vendor	2.16	0.62	30.7	15.1	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	30,040	30,040	1.54	4.20	1.72	31,330
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.08	7.76	8.47	117	0.00	0.00	36.2	36.2	0.00	8.47	8.47	—	34,004	34,004	0.43	1.33	44.0	34,455
Vendor	1.56	0.46	22.0	10.7	0.16	0.16	6.05	6.21	0.16	1.67	1.83	—	21,509	21,509	1.10	3.00	20.5	22,452

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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.66	1.42	1.55	21.4	0.00	0.00	6.60	6.60	0.00	1.55	1.55	—	5,630	5,630	0.07	0.22	7.28	5,704
Vendor	0.29	0.08	4.01	1.94	0.03	0.03	1.10	1.13	0.03	0.31	0.33	—	3,561	3,561	0.18	0.50	3.39	3,717
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	0.00	0.00

3.12. Building Construction (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.17	1.05	8.76	31.7	0.05	0.27	—	0.27	0.26	—	0.26	—	5,210	5,210	0.21	0.04	—	5,228
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.17	1.05	8.76	31.7	0.05	0.27	—	0.27	0.26	—	0.26	—	5,210	5,210	0.21	0.04	—	5,228
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.75	6.28	22.7	0.04	0.19	—	0.19	0.18	—	0.18	—	3,732	3,732	0.15	0.03	—	3,745
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.14	1.15	4.15	0.01	0.04	—	0.04	0.03	—	0.03	—	618	618	0.03	0.01	—	620
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.7	10.8	10.1	183	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	49,209	49,209	0.52	0.26	142	49,441
Vendor	2.21	0.62	29.4	14.7	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	30,023	30,023	1.52	4.20	66.1	31,377
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.6	10.7	11.8	157	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	46,836	46,836	0.60	1.85	3.67	47,407
Vendor	2.16	0.62	30.7	15.1	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	30,040	30,040	1.54	4.20	1.72	31,330
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.08	7.76	8.47	117	0.00	0.00	36.2	36.2	0.00	8.47	8.47	—	34,004	34,004	0.43	1.33	44.0	34,455
Vendor	1.56	0.46	22.0	10.7	0.16	0.16	6.05	6.21	0.16	1.67	1.83	—	21,509	21,509	1.10	3.00	20.5	22,452
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.66	1.42	1.55	21.4	0.00	0.00	6.60	6.60	0.00	1.55	1.55	—	5,630	5,630	0.07	0.22	7.28	5,704
Vendor	0.29	0.08	4.01	1.94	0.03	0.03	1.10	1.13	0.03	0.31	0.33	—	3,561	3,561	0.18	0.50	3.39	3,717
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	0.00	0.00

3.13. Building Construction (2029) - Unmitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.92	5.79	51.5	77.4	0.14	1.65	—	1.65	1.52	—	1.52	—	14,381	14,381	0.58	0.12	—	14,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.12	4.70	0.01	0.10	—	0.10	0.09	—	0.09	—	872	872	0.04	0.01	—	875
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.57	0.86	< 0.005	0.02	—	0.02	0.02	—	0.02	—	144	144	0.01	< 0.005	—	145
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.2	10.3	10.1	147	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	46,048	46,048	0.52	1.85	3.26	46,617
Vendor	2.16	0.60	29.4	14.5	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	29,244	29,244	1.52	4.20	1.53	30,534
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	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.62	0.62	9.37	0.00	0.00	3.06	3.06	0.00	0.72	0.72	—	2,832	2,832	0.03	0.11	3.31	2,869
Vendor	0.13	0.04	1.78	0.87	0.01	0.01	0.51	0.53	0.01	0.14	0.16	—	1,774	1,774	0.09	0.25	1.55	1,853
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.11	1.71	0.00	0.00	0.56	0.56	0.00	0.13	0.13	—	469	469	0.01	0.02	0.55	475
Vendor	0.02	0.01	0.33	0.16	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	294	294	0.02	0.04	0.26	307
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	0.00	0.00

3.14. Building Construction (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.17	1.05	8.75	31.7	0.05	0.27	—	0.27	0.26	—	0.26	—	5,209	5,209	0.21	0.04	—	5,227
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.53	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	316	316	0.01	< 0.005	—	317
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.10	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.3	52.3	< 0.005	< 0.005	—	52.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.2	10.3	10.1	147	0.00	0.00	51.2	51.2	0.00	12.0	12.0	—	46,048	46,048	0.52	1.85	3.26	46,617
Vendor	2.16	0.60	29.4	14.5	0.22	0.22	8.54	8.77	0.22	2.36	2.58	—	29,244	29,244	1.52	4.20	1.53	30,534
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.62	0.62	9.37	0.00	0.00	3.06	3.06	0.00	0.72	0.72	—	2,832	2,832	0.03	0.11	3.31	2,869
Vendor	0.13	0.04	1.78	0.87	0.01	0.01	0.51	0.53	0.01	0.14	0.16	—	1,774	1,774	0.09	0.25	1.55	1,853
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.11	1.71	0.00	0.00	0.56	0.56	0.00	0.13	0.13	—	469	469	0.01	0.02	0.55	475
Vendor	0.02	0.01	0.33	0.16	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	294	294	0.02	0.04	0.26	307
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	0.00	0.00

3.15. Paving (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.80	4.04	38.7	59.5	0.08	1.43	—	1.43	1.32	—	1.32	—	9,064	9,064	0.37	0.07	—	9,095
Paving	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.80	4.04	38.7	59.5	0.08	1.43	—	1.43	1.32	—	1.32	—	9,064	9,064	0.37	0.07	—	9,095
Paving	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.00	1.68	16.1	24.8	0.03	0.60	—	0.60	0.55	—	0.55	—	3,774	3,774	0.15	0.03	—	3,787
Paving	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.94	4.52	0.01	0.11	—	0.11	0.10	—	0.10	—	625	625	0.03	0.01	—	627
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.19	0.16	0.15	2.63	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	742	742	0.01	< 0.005	1.94	745
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.16	0.16	2.26	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	706	706	0.01	0.03	0.05	715
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.99	0.00	0.00	0.32	0.32	0.00	0.08	0.08	—	298	298	< 0.005	0.01	0.35	302
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	49.3	49.3	< 0.005	< 0.005	0.06	50.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.61	8.83	0.01	0.02	—	0.02	0.02	—	0.02	—	1,258	1,258	0.05	0.01	—	1,262
Paving	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.29	1.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	208	208	0.01	< 0.005	—	209
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.16	0.15	2.63	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	742	742	0.01	< 0.005	1.94	745
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.19	0.16	0.16	2.26	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	706	706	0.01	0.03	0.05	715
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.99	0.00	0.00	0.32	0.32	0.00	0.08	0.08	—	298	298	< 0.005	0.01	0.35	302
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	49.3	49.3	< 0.005	< 0.005	0.06	50.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.61	4.76	6.67	0.01	0.08	—	0.08	0.07	—	0.07	—	801	801	0.03	0.01	—	804
Architectural Coatings	—	129	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.86	1.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	144	144	0.01	< 0.005	—	145
Architectural Coatings	—	23.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.9	23.9	< 0.005	< 0.005	—	24.0
Architectural Coatings	—	4.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.43	2.06	2.03	29.5	0.00	0.00	10.2	10.2	0.00	2.40	2.40	—	9,210	9,210	0.10	0.37	0.65	9,323
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.37	0.37	5.56	0.00	0.00	1.82	1.82	0.00	0.43	0.43	—	1,681	1,681	0.02	0.07	1.96	1,703
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.08	0.07	0.07	1.02	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	278	278	< 0.005	0.01	0.33	282
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.29	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	267	267	0.01	< 0.005	—	268
Architectural Coatings	—	22.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.23	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48.1	48.1	< 0.005	< 0.005	—	48.2
Architectural Coatings	—	3.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.96	7.96	< 0.005	< 0.005	—	7.99
Architectural Coatings	—	0.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.43	2.06	2.03	29.5	0.00	0.00	10.2	10.2	0.00	2.40	2.40	—	9,210	9,210	0.10	0.37	0.65	9,323
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.37	0.37	5.56	0.00	0.00	1.82	1.82	0.00	0.43	0.43	—	1,681	1,681	0.02	0.07	1.96	1,703
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.02	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	278	278	< 0.005	0.01	0.33	282
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2030) - Unmitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.59	4.71	6.64	0.01	0.07	—	0.07	0.06	—	0.06	—	801	801	0.03	0.01	—	804
Architectural Coatings	—	129	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.81	1.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	138	138	0.01	< 0.005	—	138
Architectural Coatings	—	22.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.8	22.8	< 0.005	< 0.005	—	22.9
Architectural Coatings	—	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.36	1.99	2.01	27.9	0.00	0.00	10.2	10.2	0.00	2.40	2.40	—	9,063	9,063	0.10	0.05	0.58	9,081
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.34	0.35	5.05	0.00	0.00	1.74	1.74	0.00	0.41	0.41	—	1,582	1,582	0.02	0.01	1.66	1,587
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.92	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	262	262	< 0.005	< 0.005	0.27	263
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2030) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.29	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	267	267	0.01	< 0.005	—	268
Architectural Coatings	—	22.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.22	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.0	46.0	< 0.005	< 0.005	—	46.1
Architectural Coatings	—	3.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.61	7.61	< 0.005	< 0.005	—	7.64
Architectural Coatings	—	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.36	1.99	2.01	27.9	0.00	0.00	10.2	10.2	0.00	2.40	2.40	—	9,063	9,063	0.10	0.05	0.58	9,081
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.34	0.35	5.05	0.00	0.00	1.74	1.74	0.00	0.41	0.41	—	1,582	1,582	0.02	0.01	1.66	1,587
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.92	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	262	262	< 0.005	< 0.005	0.27	263
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	18.1	16.6	10.8	134	0.37	0.19	14.6	14.8	0.18	2.60	2.78	—	37,572	37,572	1.60	1.42	84.1	38,120
Retirement Community	1.43	1.31	0.86	10.6	0.03	0.02	1.16	1.17	0.01	0.21	0.22	—	2,973	2,973	0.13	0.11	6.65	3,017
Regional Shopping Center	23.1	21.8	10.0	112	0.25	0.15	9.68	9.83	0.14	1.72	1.85	—	25,624	25,624	1.61	1.24	55.5	26,090
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	5.60	5.16	3.15	38.4	0.10	0.05	4.06	4.12	0.05	0.72	0.77	—	10,460	10,460	0.47	0.41	23.3	10,618
Total	48.2	44.8	24.9	295	0.75	0.41	29.6	30.0	0.38	5.24	5.62	—	76,629	76,629	3.81	3.19	170	77,845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	18.0	16.5	11.8	125	0.35	0.19	14.6	14.8	0.18	2.60	2.78	—	36,139	36,139	1.66	1.49	2.18	36,626
Retirement Community	1.43	1.30	0.93	9.91	0.03	0.02	1.16	1.17	0.01	0.21	0.22	—	2,860	2,860	0.13	0.12	0.17	2,898
Regional Shopping Center	23.0	21.7	10.9	110	0.24	0.15	9.68	9.83	0.14	1.72	1.85	—	24,686	24,686	1.71	1.30	1.44	25,118
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	5.57	5.12	3.42	36.1	0.10	0.05	4.06	4.12	0.05	0.72	0.77	—	10,064	10,064	0.49	0.43	0.60	10,204
Total	48.0	44.6	27.0	281	0.72	0.41	29.6	30.0	0.38	5.24	5.62	—	73,748	73,748	4.00	3.34	4.40	74,847
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.26	2.98	2.16	23.4	0.07	0.04	2.67	2.71	0.03	0.47	0.51	—	6,047	6,047	0.27	0.25	6.01	6,134

Retirement Commun	0.26	0.24	0.17	1.85	0.01	< 0.005	0.21	0.21	< 0.005	0.04	0.04	—	479	479	0.02	0.02	0.48	485
Regional Shopping Center	4.12	3.89	1.91	19.4	0.04	0.03	1.63	1.66	0.02	0.29	0.31	—	3,837	3,837	0.27	0.21	3.67	3,909
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.01	0.93	0.63	6.73	0.02	0.01	0.74	0.75	0.01	0.13	0.14	—	1,684	1,684	0.08	0.07	1.67	1,709
Total	8.65	8.03	4.87	51.3	0.13	0.07	5.26	5.33	0.07	0.93	1.00	—	12,046	12,046	0.65	0.54	11.8	12,236

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	12.7	11.6	7.58	93.9	0.26	0.14	10.3	10.4	0.13	1.82	1.94	—	26,300	26,300	1.12	1.00	58.8	26,684
Retirement Community	1.00	0.92	0.60	7.43	0.02	0.01	0.81	0.82	0.01	0.14	0.15	—	2,081	2,081	0.09	0.08	4.66	2,112
Regional Shopping Center	22.6	21.3	9.79	109	0.25	0.14	9.46	9.60	0.13	1.68	1.81	—	25,040	25,040	1.57	1.22	54.3	25,496

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	5.47	5.04	3.08	37.5	0.10	0.05	3.97	4.02	0.05	0.70	0.75	—	10,222	10,222	0.46	0.40	22.8	10,376
Total	41.7	38.9	21.0	248	0.62	0.34	24.5	24.8	0.32	4.34	4.66	—	63,643	63,643	3.24	2.69	141	64,667
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	12.6	11.5	8.23	87.6	0.25	0.14	10.3	10.4	0.13	1.82	1.94	—	25,297	25,297	1.16	1.04	1.53	25,638
Retirement Community	1.00	0.91	0.65	6.94	0.02	0.01	0.81	0.82	0.01	0.14	0.15	—	2,002	2,002	0.09	0.08	0.12	2,029
Regional Shopping Center	22.5	21.2	10.6	107	0.24	0.14	9.46	9.60	0.13	1.68	1.81	—	24,123	24,123	1.68	1.27	1.41	24,546
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	5.45	5.01	3.34	35.3	0.10	0.05	3.97	4.02	0.05	0.70	0.75	—	9,834	9,834	0.48	0.42	0.59	9,972
Total	41.5	38.6	22.8	237	0.60	0.34	24.5	24.8	0.32	4.34	4.66	—	61,257	61,257	3.41	2.82	3.64	62,185
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	2.28	2.08	1.51	16.4	0.05	0.02	1.87	1.90	0.02	0.33	0.35	—	4,233	4,233	0.19	0.17	4.21	4,293
Retirement Community	0.18	0.16	0.12	1.29	< 0.005	< 0.005	0.15	0.15	< 0.005	0.03	0.03	—	335	335	0.02	0.01	0.33	340
Regional Shopping Center	4.03	3.80	1.87	18.9	0.04	0.02	1.60	1.62	0.02	0.28	0.31	—	3,749	3,749	0.27	0.20	3.59	3,820
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.99	0.91	0.61	6.58	0.02	0.01	0.72	0.73	0.01	0.13	0.14	—	1,645	1,645	0.08	0.07	1.63	1,670
Total	7.48	6.96	4.11	43.2	0.11	0.06	4.34	4.40	0.06	0.77	0.83	—	9,963	9,963	0.55	0.46	9.76	10,123

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	7,346	7,346	0.46	0.06	—	7,374

Retirement Commun	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118	0.07	0.01	—	1,122
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	3,579	3,579	0.22	0.03	—	3,592
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	7,562	7,562	0.47	0.06	—	7,591
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	7,404	7,404	0.46	0.06	—	7,432
Total	—	—	—	—	—	—	—	—	—	—	—	—	27,009	27,009	1.68	0.20	—	27,111
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	7,346	7,346	0.46	0.06	—	7,374
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118	0.07	0.01	—	1,122
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	3,579	3,579	0.22	0.03	—	3,592
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	7,562	7,562	0.47	0.06	—	7,591
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	7,404	7,404	0.46	0.06	—	7,432
Total	—	—	—	—	—	—	—	—	—	—	—	—	27,009	27,009	1.68	0.20	—	27,111
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,216	1,216	0.08	0.01	—	1,221
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	185	185	0.01	< 0.005	—	186
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	592	592	0.04	< 0.005	—	595
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,252	1,252	0.08	0.01	—	1,257
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,226	1,226	0.08	0.01	—	1,230
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,472	4,472	0.28	0.03	—	4,489

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

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	6,874	6,874	0.43	0.05	—	6,900
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	1,048	1,048	0.06	0.01	—	1,052
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	3,209	3,209	0.20	0.02	—	3,221
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	7,619	7,619	0.47	0.06	—	7,648
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	6,438	6,438	0.40	0.05	—	6,462
Total	—	—	—	—	—	—	—	—	—	—	—	—	25,189	25,189	1.56	0.19	—	25,284
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	6,820	6,820	0.42	0.05	—	6,846
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	1,040	1,040	0.06	0.01	—	1,044
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	3,199	3,199	0.20	0.02	—	3,211
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	7,562	7,562	0.47	0.06	—	7,591

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	6,423	6,423	0.40	0.05	—	6,448
Total	—	—	—	—	—	—	—	—	—	—	—	—	25,044	25,044	1.55	0.19	—	25,139
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,135	1,135	0.07	0.01	—	1,140
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	173	173	0.01	< 0.005	—	174
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	531	531	0.03	< 0.005	—	533
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	1,258	1,258	0.08	0.01	—	1,263
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	1,065	1,065	0.07	0.01	—	1,069
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,163	4,163	0.26	0.03	—	4,178

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.45	0.23	3.86	1.64	0.02	0.31	—	0.31	0.31	—	0.31	—	4,894	4,894	0.43	0.01	—	4,908
Retirement Community	0.10	0.05	0.82	0.35	0.01	0.07	—	0.07	0.07	—	0.07	—	1,045	1,045	0.09	< 0.005	—	1,048
Regional Shopping Center	0.04	0.02	0.40	0.34	< 0.005	0.03	—	0.03	0.03	—	0.03	—	480	480	0.04	< 0.005	—	481
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.31	0.15	2.82	2.36	0.02	0.21	—	0.21	0.21	—	0.21	—	3,359	3,359	0.30	0.01	—	3,368
Total	0.90	0.45	7.90	4.69	0.05	0.62	—	0.62	0.62	—	0.62	—	9,778	9,778	0.87	0.02	—	9,805
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.45	0.23	3.86	1.64	0.02	0.31	—	0.31	0.31	—	0.31	—	4,894	4,894	0.43	0.01	—	4,908
Retirement Community	0.10	0.05	0.82	0.35	0.01	0.07	—	0.07	0.07	—	0.07	—	1,045	1,045	0.09	< 0.005	—	1,048
Regional Shopping Center	0.04	0.02	0.40	0.34	< 0.005	0.03	—	0.03	0.03	—	0.03	—	480	480	0.04	< 0.005	—	481

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.31	0.15	2.82	2.36	0.02	0.21	—	0.21	0.21	—	0.21	—	3,359	3,359	0.30	0.01	—	3,368
Total	0.90	0.45	7.90	4.69	0.05	0.62	—	0.62	0.62	—	0.62	—	9,778	9,778	0.87	0.02	—	9,805
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.08	0.04	0.70	0.30	< 0.005	0.06	—	0.06	0.06	—	0.06	—	810	810	0.07	< 0.005	—	813
Retirement Community	0.02	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Regional Shopping Center	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	79.4	79.4	0.01	< 0.005	—	79.6
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.51	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	556	556	0.05	< 0.005	—	558
Total	0.16	0.08	1.44	0.86	0.01	0.11	—	0.11	0.11	—	0.11	—	1,619	1,619	0.14	< 0.005	—	1,623

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.40	0.20	3.42	1.45	0.02	0.28	—	0.28	0.28	—	0.28	—	4,337	4,337	0.38	0.01	—	4,349
Retirement Community	0.09	0.04	0.73	0.31	< 0.005	0.06	—	0.06	0.06	—	0.06	—	926	926	0.08	< 0.005	—	929
Regional Shopping Center	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	476	476	0.04	< 0.005	—	477
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.30	0.15	2.70	2.27	0.02	0.21	—	0.21	0.21	—	0.21	—	3,227	3,227	0.29	0.01	—	3,236
Total	0.83	0.41	7.25	4.37	0.05	0.57	—	0.57	0.57	—	0.57	—	8,966	8,966	0.79	0.02	—	8,991
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.40	0.20	3.42	1.45	0.02	0.28	—	0.28	0.28	—	0.28	—	4,337	4,337	0.38	0.01	—	4,349
Retirement Community	0.09	0.04	0.73	0.31	< 0.005	0.06	—	0.06	0.06	—	0.06	—	926	926	0.08	< 0.005	—	929

Regional Shopping Center	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	476	476	0.04	< 0.005	—	477
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.30	0.15	2.70	2.27	0.02	0.21	—	0.21	0.21	—	0.21	—	3,227	3,227	0.29	0.01	—	3,236
Total	0.83	0.41	7.25	4.37	0.05	0.57	—	0.57	0.57	—	0.57	—	8,966	8,966	0.79	0.02	—	8,991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.07	0.04	0.62	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	—	718	718	0.06	< 0.005	—	720
Retirement Community	0.02	0.01	0.13	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	153	153	0.01	< 0.005	—	154
Regional Shopping Center	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.7	78.7	0.01	< 0.005	—	79.0
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.05	0.03	0.49	0.41	< 0.005	0.04	—	0.04	0.04	—	0.04	—	534	534	0.05	< 0.005	—	536
Total	0.15	0.08	1.32	0.80	0.01	0.10	—	0.10	0.10	—	0.10	—	1,484	1,484	0.13	< 0.005	—	1,489

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	50.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	4.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	23.8	22.2	1.57	177	0.01	0.15	—	0.15	0.20	—	0.20	—	600	600	0.03	0.01	—	602
Total	23.8	77.1	1.57	177	0.01	0.15	—	0.15	0.20	—	0.20	0.00	600	600	0.03	0.01	—	602
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	50.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	4.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	54.9	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	9.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	—	0.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	2.97	2.77	0.20	22.2	< 0.005	0.02	—	0.02	0.02	—	0.02	—	68.0	68.0	< 0.005	< 0.005	—	68.3
Total	2.97	12.8	0.20	22.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	68.0	68.0	< 0.005	< 0.005	—	68.3

4.3.1. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consum er Products	—	50.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	—	0.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	51.1	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consum er Products	—	50.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	51.1	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	9.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	9.33	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	98.9	512	611	10.2	0.24	—	938
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	14.4	74.5	88.8	1.48	0.04	—	136
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	35.5	184	219	3.65	0.09	—	337

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	16.7	16.7	< 0.005	< 0.005	—	16.8
Hotel	—	—	—	—	—	—	—	—	—	—	—	12.2	62.9	75.1	1.25	0.03	—	115
Total	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	98.9	512	611	10.2	0.24	—	938
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	14.4	74.5	88.8	1.48	0.04	—	136
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	35.5	184	219	3.65	0.09	—	337
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	16.7	16.7	< 0.005	< 0.005	—	16.8
Hotel	—	—	—	—	—	—	—	—	—	—	—	12.2	62.9	75.1	1.25	0.03	—	115
Total	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	16.4	84.8	101	1.68	0.04	—	155
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	2.38	12.3	14.7	0.24	0.01	—	22.6
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	5.87	30.4	36.3	0.60	0.01	—	55.7
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	2.77	2.77	< 0.005	< 0.005	—	2.78
Hotel	—	—	—	—	—	—	—	—	—	—	—	2.01	10.4	12.4	0.21	< 0.005	—	19.1
Total	—	—	—	—	—	—	—	—	—	—	—	26.6	141	167	2.74	0.07	—	255

4.4.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	98.9	512	611	10.2	0.24	—	938
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	14.4	74.5	88.8	1.48	0.04	—	136

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	35.5	184	219	3.65	0.09	—	337
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	16.7	16.7	< 0.005	< 0.005	—	16.8
Hotel	—	—	—	—	—	—	—	—	—	—	—	12.2	62.9	75.1	1.25	0.03	—	115
Total	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	98.9	512	611	10.2	0.24	—	938
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	14.4	74.5	88.8	1.48	0.04	—	136
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	35.5	184	219	3.65	0.09	—	337
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	16.7	16.7	< 0.005	< 0.005	—	16.8
Hotel	—	—	—	—	—	—	—	—	—	—	—	12.2	62.9	75.1	1.25	0.03	—	115

Total	—	—	—	—	—	—	—	—	—	—	—	161	850	1,011	16.6	0.40	—	1,543
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	16.4	84.8	101	1.68	0.04	—	155
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	2.38	12.3	14.7	0.24	0.01	—	22.6
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	5.87	30.4	36.3	0.60	0.01	—	55.7
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	2.77	2.77	< 0.005	< 0.005	—	2.78
Hotel	—	—	—	—	—	—	—	—	—	—	—	2.01	10.4	12.4	0.21	< 0.005	—	19.1
Total	—	—	—	—	—	—	—	—	—	—	—	26.6	141	167	2.74	0.07	—	255

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

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

Apartments	—	—	—	—	—	—	—	—	—	—	—	548	0.00	548	54.8	0.00	—	1,917
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,026
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14.1	0.00	—	495
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.08	0.00	0.08	0.01	0.00	—	0.28
Hotel	—	—	—	—	—	—	—	—	—	—	—	73.8	0.00	73.8	7.37	0.00	—	258
Total	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	548	0.00	548	54.8	0.00	—	1,917
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,026
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14.1	0.00	—	495
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.08	0.00	0.08	0.01	0.00	—	0.28
Hotel	—	—	—	—	—	—	—	—	—	—	—	73.8	0.00	73.8	7.37	0.00	—	258
Total	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	90.7	0.00	90.7	9.07	0.00	—	317
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	48.6	0.00	48.6	4.85	0.00	—	170
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	23.4	0.00	23.4	2.34	0.00	—	81.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.01	0.00	0.01	< 0.005	0.00	—	0.05
Hotel	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.22	0.00	—	42.7
Total	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	612

4.5.1. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	548	0.00	548	54.8	0.00	—	1,917
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,026
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14.1	0.00	—	495
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.08	0.00	0.08	0.01	0.00	—	0.28
Hotel	—	—	—	—	—	—	—	—	—	—	—	73.8	0.00	73.8	7.37	0.00	—	258
Total	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	548	0.00	548	54.8	0.00	—	1,917
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,026
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14.1	0.00	—	495

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.08	0.00	0.08	0.01	0.00	—	0.28
Hotel	—	—	—	—	—	—	—	—	—	—	—	73.8	0.00	73.8	7.37	0.00	—	258
Total	—	—	—	—	—	—	—	—	—	—	—	1,057	0.00	1,057	106	0.00	—	3,697
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	90.7	0.00	90.7	9.07	0.00	—	317
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	48.6	0.00	48.6	4.85	0.00	—	170
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	23.4	0.00	23.4	2.34	0.00	—	81.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.01	0.00	0.01	< 0.005	0.00	—	0.05
Hotel	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.22	0.00	—	42.7
Total	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	612

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.8	10.8
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.86	2.86
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.20	1.20
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	567	567
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.8	10.8
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.86	2.86
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.20	1.20
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	567	567
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.79	1.79
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.20	0.20
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.9	93.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96.4	96.4

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.8	10.8
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.86	2.86
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.20	1.20

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	567	567
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.8	10.8
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.86	2.86
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.20	1.20
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	567	567
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	582	582
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.79	1.79
Retirement Community	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.20	0.20
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.9	93.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96.4	96.4

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	1/1/2026	2/28/2026	5.00	42.0	—
Site Preparation	Site Preparation	3/1/2026	5/31/2026	5.00	65.0	—
Grading	Grading	6/1/2026	9/30/2026	5.00	88.0	—
Building Construction	Building Construction	10/1/2026	1/31/2029	5.00	610	—
Paving	Paving	2/1/2029	8/31/2029	5.00	152	—
Architectural Coating	Architectural Coating	10/1/2029	3/29/2030	5.00	130	—

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/Backh	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
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
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40

Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	281	20.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	281	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	910	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	910	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,957	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	499	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck	—	—	HHDT
Building Construction	Worker	1,957	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	499	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	391	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Architectural Coating	Worker	391	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

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

Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	281	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	281	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	910	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	910	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—

Building Construction	Worker	1,957	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	499	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Building Construction	Worker	1,957	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	499	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	391	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Architectural Coating	Worker	391	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,519,600	1,173,200	933,339	308,038	18,687

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	47,193	—
Site Preparation	—	—	195	0.00	—
Grading	—	640,550	528	0.00	—
Paving	0.00	0.00	0.00	0.00	13.6

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

Apartments Mid Rise	—	0%
Retirement Community	—	0%
Regional Shopping Center	0.00	0%
Enclosed Parking with Elevator	7.06	100%
Other Asphalt Surfaces	6.50	100%
City Park	0.00	0%
Hotel	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2029	0.00	346	0.03	< 0.005
2030	0.00	261	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2029	0.00	346	0.03	< 0.005
2030	0.00	261	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2029	0.00	346	0.03	< 0.005
2030	0.00	261	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	6,243	6,243	6,243	2,278,513	52,897	52,897	52,897	19,307,433
Retirement Community	494	494	494	180,310	4,186	4,186	4,186	1,527,893
Regional Shopping Center	9,252	9,252	9,252	3,377,162	31,276	34,952	34,952	11,799,205
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1,998	1,998	1,998	729,088	14,669	14,669	14,669	5,354,170

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	4,370	4,370	4,370	1,594,959	37,028	37,028	37,028	13,515,203
Retirement Community	346	346	346	126,217	2,930	2,930	2,930	1,069,525
Regional Shopping Center	9,042	9,042	9,042	3,300,199	30,564	34,156	34,156	11,530,308
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1,952	1,952	1,952	712,472	14,335	14,335	14,335	5,232,151

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	138
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Retirement Community	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	20
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)

Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	138
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Retirement Community	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	20
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3519599	1,173,199	933,339	308,038	1,867

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)
Apartments Mid Rise	5,040,522	532	0.0330	0.0040	15,271,909
Retirement Community	767,009	532	0.0330	0.0040	3,261,135
Regional Shopping Center	2,455,342	532	0.0330	0.0040	1,496,736
Enclosed Parking with Elevator	5,188,307	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
City Park	0.00	532	0.0330	0.0040	0.00
Hotel	5,079,714	532	0.0330	0.0040	10,480,427

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	4,679,103	532	0.0330	0.0040	13,532,992
Retirement Community	713,427	532	0.0330	0.0040	2,889,637

Regional Shopping Center	2,194,869	532	0.0330	0.0040	1,483,999
Enclosed Parking with Elevator	5,188,307	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
City Park	0.00	532	0.0330	0.0040	0.00
Hotel	4,407,030	532	0.0330	0.0040	10,070,535

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	51,597,769	0.00
Retirement Community	7,505,130	0.00
Regional Shopping Center	18,518,130	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	2,160,062
Hotel	6,341,693	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	51,597,769	0.00
Retirement Community	7,505,130	0.00
Regional Shopping Center	18,518,130	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	2,160,062
Hotel	6,341,693	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	1016.89	0.00
Retirement Community	544.22	0.00
Regional Shopping Center	262.50	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.15	0.00
Hotel	136.88	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	1016.89	0.00
Retirement Community	544.22	0.00
Regional Shopping Center	262.50	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.15	0.00
Hotel	136.88	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

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

Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Retirement Community	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Retirement Community	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

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

Retirement Community	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Retirement Community	Household refrigerators and/or freezers	R-134a	1,430	0.22	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.23	annual days of extreme heat
Extreme Precipitation	3.60	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	53.7
AQ-PM	59.2
AQ-DPM	30.6
Drinking Water	44.6
Lead Risk Housing	34.5
Pesticides	0.00
Toxic Releases	86.8
Traffic	55.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	47.4
Haz Waste Facilities/Generators	74.7
Impaired Water Bodies	0.00
Solid Waste	0.00

Sensitive Population	—
Asthma	42.3
Cardio-vascular	34.4
Low Birth Weights	36.7
Socioeconomic Factor Indicators	—
Education	43.4
Housing	53.6
Linguistic	37.7
Poverty	50.2
Unemployment	3.58

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	59.19414859
Employed	97.42076222
Median HI	59.19414859
Education	—
Bachelor's or higher	73.0784037
High school enrollment	100
Preschool enrollment	9.713845759
Transportation	—
Auto Access	57.21801617
Active commuting	16.10419607
Social	—
2-parent households	16.88694983

Voting	23.36712434
Neighborhood	—
Alcohol availability	51.4307712
Park access	41.76825356
Retail density	84.88387014
Supermarket access	69.88322854
Tree canopy	67.77877582
Housing	—
Homeownership	21.2498396
Housing habitability	46.43911202
Low-inc homeowner severe housing cost burden	27.30655717
Low-inc renter severe housing cost burden	80.90594123
Uncrowded housing	40.60053895
Health Outcomes	—
Insured adults	46.18247145
Arthritis	92.6
Asthma ER Admissions	65.9
High Blood Pressure	92.0
Cancer (excluding skin)	60.5
Asthma	80.2
Coronary Heart Disease	91.8
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	90.6
Life Expectancy at Birth	65.4
Cognitively Disabled	35.0
Physically Disabled	85.5
Heart Attack ER Admissions	71.9

Mental Health Not Good	73.6
Chronic Kidney Disease	93.4
Obesity	86.0
Pedestrian Injuries	44.9
Physical Health Not Good	85.2
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	10.6
Current Smoker	71.8
No Leisure Time for Physical Activity	71.9
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	71.1
Elderly	60.7
English Speaking	61.5
Foreign-born	71.2
Outdoor Workers	41.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.4
Traffic Density	53.3
Traffic Access	57.9
Other Indices	—
Hardship	23.6
Other Decision Support	—
2016 Voting	60.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	34.0
Healthy Places Index Score for Project Location (b)	57.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Adjusted per project specific details. Landscape area included in City Park, rec area included in overall square footage.
Construction: Construction Phases	anticipated construction schedule
Construction: Paving	other asphalt surfaces increased to capture all potential paved areas
Operations: Vehicle Data	Trip rates per Traffic Study
Operations: Hearths	No wood burning per SCAQMD Rule 445
Operations: Water and Waste Water	Outdoor area/water usage combined in City Park use
Construction: Architectural Coatings	Added coatings phase

Bristol Phase 2 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bristol Phase 2
Construction Start Date	4/1/2030
Operational Year	2033
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	33.698591238074684, -117.88632929922632
County	Orange
City	Santa Ana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5946
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.8

1.2. Land Use Types

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

Apartments Mid Rise	856	Dwelling Unit	3.81	941,600	0.00	—	2,551	—
Regional Shopping Center	65.0	1000sqft	0.26	65,000	0.00	—	—	—
Enclosed Parking with Elevator	656	1000sqft	2.66	656,000	0.00	—	—	—
Other Asphalt Surfaces	115	1000sqft	0.46	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
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction
Transportation	T-1	Increase Residential Density
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-31-A*	Locate Project in Area with High Destination Accessibility
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

* 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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.9	128	151	176	0.29	6.40	16.1	17.5	5.89	5.36	11.2	—	40,497	40,497	1.76	2.58	33.1	40,887
Mit.	5.12	27.8	25.1	99.2	0.17	0.45	16.1	16.5	0.43	5.36	5.56	—	26,113	26,113	1.28	2.48	33.1	26,453
% Reduced	76%	78%	83%	44%	43%	93%	—	6%	93%	—	51%	—	36%	36%	27%	4%	—	35%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.6	128	131	174	0.36	4.61	16.1	17.5	4.26	3.85	7.47	—	42,752	42,752	2.13	2.66	0.86	43,598
Mit.	5.11	27.7	26.0	94.0	0.20	0.45	16.1	16.5	0.43	3.85	4.21	—	25,574	25,574	1.41	2.51	0.86	25,883
% Reduced	69%	78%	80%	46%	46%	90%	—	6%	90%	—	44%	—	40%	40%	34%	5%	—	41%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.92	40.8	58.2	98.2	0.16	2.13	9.02	10.5	1.96	2.16	3.55	—	23,965	23,965	0.85	1.01	9.29	24,200
Mit.	3.23	9.54	15.7	57.0	0.08	0.28	9.02	9.30	0.27	2.16	2.43	—	16,006	16,006	0.55	0.95	9.29	16,214
% Reduced	59%	77%	73%	42%	47%	87%	—	12%	86%	—	32%	—	33%	33%	36%	6%	—	33%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.45	7.45	10.6	17.9	0.03	0.39	1.65	1.92	0.36	0.39	0.65	—	3,968	3,968	0.14	0.17	1.54	4,007
Mit.	0.59	1.74	2.86	10.4	0.02	0.05	1.65	1.70	0.05	0.39	0.44	—	2,650	2,650	0.09	0.16	1.54	2,684
% Reduced	59%	77%	73%	42%	47%	87%	—	12%	86%	—	32%	—	33%	33%	36%	6%	—	33%

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	20.9	17.6	151	172	0.29	6.40	11.5	17.1	5.89	5.36	11.2	—	33,352	33,352	1.76	2.58	24.9	34,190
2031	13.8	11.8	92.9	176	0.27	2.77	14.1	16.9	2.55	3.38	5.93	—	40,497	40,497	1.32	1.09	33.1	40,887
2032	10.1	128	58.9	127	0.20	1.44	16.1	17.5	1.33	3.85	5.18	—	33,670	33,670	1.00	0.98	32.2	34,020
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	16.6	13.2	131	174	0.36	4.61	8.91	13.5	4.26	3.21	7.47	—	42,752	42,752	2.13	2.66	0.67	43,598
2031	13.8	11.7	93.2	171	0.27	2.77	14.1	16.9	2.55	3.38	5.93	—	39,958	39,958	1.34	1.09	0.86	40,317
2032	10.1	128	59.6	121	0.20	1.44	16.1	17.5	1.33	3.85	5.18	—	33,053	33,053	1.00	0.98	0.84	33,372
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	7.53	6.02	58.2	69.0	0.15	2.13	4.63	6.76	1.96	1.51	3.47	—	17,254	17,254	0.85	1.01	4.16	17,581
2031	7.92	6.75	52.1	98.2	0.16	1.51	9.02	10.5	1.39	2.16	3.55	—	23,965	23,965	0.79	0.69	9.29	24,200
2032	5.70	40.8	34.1	69.5	0.12	0.85	8.80	9.64	0.78	2.11	2.89	—	18,976	18,976	0.58	0.58	7.78	19,171
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.38	1.10	10.6	12.6	0.03	0.39	0.84	1.23	0.36	0.28	0.63	—	2,857	2,857	0.14	0.17	0.69	2,911
2031	1.45	1.23	9.52	17.9	0.03	0.28	1.65	1.92	0.25	0.39	0.65	—	3,968	3,968	0.13	0.11	1.54	4,007
2032	1.04	7.45	6.23	12.7	0.02	0.15	1.61	1.76	0.14	0.38	0.53	—	3,142	3,142	0.10	0.10	1.29	3,174

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.97	1.09	21.5	58.1	0.17	0.33	11.5	11.8	0.33	5.36	5.56	—	21,516	21,516	1.28	2.48	24.9	22,313

2031	5.12	4.58	25.1	99.2	0.14	0.45	14.1	14.6	0.43	3.38	3.81	—	26,113	26,113	0.74	0.97	33.1	26,453
2032	5.10	27.8	22.1	83.7	0.11	0.38	16.1	16.5	0.36	3.85	4.21	—	24,794	24,794	0.64	0.91	32.2	25,114
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	2.36	1.34	26.0	66.8	0.20	0.38	8.91	9.30	0.38	3.21	3.59	—	24,874	24,874	1.41	2.51	0.67	25,658
2031	5.11	4.55	25.4	94.0	0.14	0.45	14.1	14.6	0.43	3.38	3.81	—	25,574	25,574	0.76	0.97	0.86	25,883
2032	5.09	27.7	22.8	78.1	0.11	0.38	16.1	16.5	0.36	3.85	4.21	—	24,177	24,177	0.64	0.91	0.84	24,465
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.92	0.53	10.2	25.9	0.08	0.15	4.63	4.78	0.15	1.51	1.66	—	9,748	9,748	0.55	0.95	4.16	10,050
2031	3.23	2.87	15.7	57.0	0.08	0.28	9.02	9.30	0.27	2.16	2.43	—	16,006	16,006	0.47	0.63	9.29	16,214
2032	2.88	9.54	13.1	45.2	0.07	0.23	8.80	9.03	0.22	2.11	2.32	—	13,836	13,836	0.38	0.54	7.78	14,013
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.17	0.10	1.87	4.72	0.01	0.03	0.84	0.87	0.03	0.28	0.30	—	1,614	1,614	0.09	0.16	0.69	1,664
2031	0.59	0.52	2.86	10.4	0.02	0.05	1.65	1.70	0.05	0.39	0.44	—	2,650	2,650	0.08	0.10	1.54	2,684
2032	0.53	1.74	2.40	8.24	0.01	0.04	1.61	1.65	0.04	0.38	0.42	—	2,291	2,291	0.06	0.09	1.29	2,320

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.2	47.5	11.4	185	0.30	0.40	11.6	12.0	0.41	2.06	2.46	449	41,444	41,893	47.2	1.38	50.5	43,535
Mit.	12.9	33.8	8.61	81.1	0.23	0.28	8.83	9.12	0.28	1.56	1.84	449	33,934	34,383	46.9	1.12	40.0	35,929
% Reduced	51%	29%	25%	56%	24%	28%	24%	24%	32%	24%	25%	—	18%	18%	1%	19%	21%	17%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.1	38.1	11.4	99.2	0.29	0.34	11.6	12.0	0.33	2.06	2.39	449	40,099	40,547	47.2	1.43	8.18	42,163
Mit.	12.9	33.7	9.16	76.9	0.22	0.28	8.83	9.12	0.28	1.56	1.84	449	33,045	33,494	46.9	1.16	7.91	35,021
% Reduced	20%	12%	20%	22%	23%	16%	24%	24%	16%	24%	23%	—	18%	17%	1%	19%	3%	17%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22.8	44.4	11.9	155	0.29	0.38	11.4	11.8	0.38	2.02	2.40	449	40,132	40,581	47.2	1.42	25.5	42,210
Mit.	12.7	33.6	9.10	77.2	0.22	0.28	8.65	8.93	0.28	1.53	1.81	449	32,884	33,333	46.9	1.15	21.0	34,869
% Reduced	44%	24%	23%	50%	24%	25%	24%	24%	28%	24%	25%	—	18%	18%	1%	19%	18%	17%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.16	8.10	2.16	28.3	0.05	0.07	2.09	2.16	0.07	0.37	0.44	74.3	6,644	6,719	7.82	0.24	4.22	6,988
Mit.	2.32	6.13	1.66	14.1	0.04	0.05	1.58	1.63	0.05	0.28	0.33	74.3	5,444	5,519	7.76	0.19	3.48	5,773
% Reduced	44%	24%	23%	50%	24%	25%	24%	24%	28%	24%	25%	—	18%	18%	1%	19%	18%	17%

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.9	14.7	8.20	104	0.28	0.14	11.6	11.8	0.13	2.06	2.18	—	28,614	28,614	1.27	1.13	43.4	29,026
Area	10.0	32.7	0.71	80.1	< 0.005	0.06	—	0.06	0.08	—	0.08	0.00	259	259	0.01	< 0.005	—	260
Energy	0.29	0.15	2.51	1.11	0.02	0.20	—	0.20	0.20	—	0.20	—	12,205	12,205	0.84	0.07	—	12,248
Water	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671

Waste	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Total	26.2	47.5	11.4	185	0.30	0.40	11.6	12.0	0.41	2.06	2.46	449	41,444	41,893	47.2	1.38	50.5	43,535
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.8	14.6	8.90	98.1	0.27	0.14	11.6	11.8	0.13	2.06	2.18	—	27,527	27,527	1.33	1.18	1.13	27,914
Area	0.00	23.3	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.29	0.15	2.51	1.11	0.02	0.20	—	0.20	0.20	—	0.20	—	12,205	12,205	0.84	0.07	—	12,248
Water	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671
Waste	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Total	16.1	38.1	11.4	99.2	0.29	0.34	11.6	12.0	0.33	2.06	2.39	449	40,099	40,547	47.2	1.43	8.18	42,163
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.6	14.5	8.86	98.9	0.27	0.13	11.4	11.6	0.12	2.02	2.15	—	27,383	27,383	1.31	1.17	18.4	27,784
Area	6.86	29.8	0.49	54.9	< 0.005	0.04	—	0.04	0.05	—	0.05	0.00	177	177	0.01	< 0.005	—	178
Energy	0.29	0.15	2.51	1.11	0.02	0.20	—	0.20	0.20	—	0.20	—	12,205	12,205	0.84	0.07	—	12,248
Water	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671
Waste	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Total	22.8	44.4	11.9	155	0.29	0.38	11.4	11.8	0.38	2.02	2.40	449	40,132	40,581	47.2	1.42	25.5	42,210
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.85	2.64	1.62	18.0	0.05	0.02	2.09	2.11	0.02	0.37	0.39	—	4,534	4,534	0.22	0.19	3.05	4,600
Area	1.25	5.43	0.09	10.0	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	29.3	29.3	< 0.005	< 0.005	—	29.5
Energy	0.05	0.03	0.46	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	2,021	2,021	0.14	0.01	—	2,028
Water	—	—	—	—	—	—	—	—	—	—	—	11.7	60.7	72.4	1.21	0.03	—	111
Waste	—	—	—	—	—	—	—	—	—	—	—	62.6	0.00	62.6	6.25	0.00	—	219
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17

Total	4.16	8.10	2.16	28.3	0.05	0.07	2.09	2.16	0.07	0.37	0.44	74.3	6,644	6,719	7.82	0.24	4.22	6,988

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.6	11.7	6.38	80.1	0.21	0.10	8.83	8.94	0.10	1.56	1.66	—	21,789	21,789	1.00	0.88	33.0	22,108
Area	0.00	21.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.26	0.13	2.23	0.99	0.01	0.18	—	0.18	0.18	—	0.18	—	11,778	11,778	0.81	0.07	—	11,820
Water	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671
Waste	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Total	12.9	33.8	8.61	81.1	0.23	0.28	8.83	9.12	0.28	1.56	1.84	449	33,934	34,383	46.9	1.12	40.0	35,929
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.6	11.7	6.93	75.9	0.21	0.10	8.83	8.94	0.10	1.56	1.66	—	20,963	20,963	1.04	0.92	0.86	21,263
Area	0.00	21.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.26	0.13	2.23	0.99	0.01	0.18	—	0.18	0.18	—	0.18	—	11,715	11,715	0.80	0.07	—	11,756
Water	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671
Waste	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Total	12.9	33.7	9.16	76.9	0.22	0.28	8.83	9.12	0.28	1.56	1.84	449	33,045	33,494	46.9	1.16	7.91	35,021
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.4	11.5	6.87	76.3	0.20	0.10	8.65	8.75	0.10	1.53	1.63	—	20,759	20,759	1.02	0.90	13.9	21,068
Area	0.00	21.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Energy	0.26	0.13	2.23	0.99	0.01	0.18	—	0.18	0.18	—	0.18	—	11,758	11,758	0.80	0.07	—	11,800
Water	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671
Waste	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Total	12.7	33.6	9.10	77.2	0.22	0.28	8.65	8.93	0.28	1.53	1.81	449	32,884	33,333	46.9	1.15	21.0	34,869
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.27	2.11	1.25	13.9	0.04	0.02	1.58	1.60	0.02	0.28	0.30	—	3,437	3,437	0.17	0.15	2.31	3,488
Area	0.00	4.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.05	0.02	0.41	0.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,947	1,947	0.13	0.01	—	1,954
Water	—	—	—	—	—	—	—	—	—	—	—	11.7	60.7	72.4	1.21	0.03	—	111
Waste	—	—	—	—	—	—	—	—	—	—	—	62.6	0.00	62.6	6.25	0.00	—	219
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Total	2.32	6.13	1.66	14.1	0.04	0.05	1.58	1.63	0.05	0.28	0.33	74.3	5,444	5,519	7.76	0.19	3.48	5,773

3. Construction Emissions Details

3.1. Demolition (2030) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	14.9	12.5	109	112	0.20	4.31	—	4.31	3.96	—	3.96	—	20,558	20,558	0.83	0.17	—	20,628
Demolition	—	—	—	—	—	—	8.40	8.40	—	1.27	1.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.84	1.54	13.4	13.8	0.02	0.53	—	0.53	0.49	—	0.49	—	2,535	2,535	0.10	0.02	—	2,543
Demolition	—	—	—	—	—	—	1.04	1.04	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.45	2.52	< 0.005	0.10	—	0.10	0.09	—	0.09	—	420	420	0.02	< 0.005	—	421
Demolition	—	—	—	—	—	—	0.19	0.19	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.25	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	365	365	< 0.005	< 0.005	0.85	366
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.81	0.16	10.8	4.90	0.07	0.13	2.75	2.88	0.13	0.77	0.91	—	9,477	9,477	0.65	1.51	14.9	9,959
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	43.4	43.4	< 0.005	< 0.005	0.05	43.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.10	0.02	1.39	0.61	0.01	0.02	0.34	0.35	0.02	0.09	0.11	—	1,169	1,169	0.08	0.19	0.79	1,227

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	0.01	7.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	< 0.005	0.25	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	193	193	0.01	0.03	0.13	203

3.2. Demolition (2030) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	9.01	36.3	0.07	0.13	—	0.13	0.13	—	0.13	—	6,853	6,853	0.28	0.06	—	6,876
Demolition	—	—	—	—	—	—	8.40	8.40	—	1.27	1.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	1.11	4.48	0.01	0.02	—	0.02	0.02	—	0.02	—	845	845	0.03	0.01	—	848
Demolition	—	—	—	—	—	—	1.04	1.04	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	140	140	0.01	< 0.005	—	140

Demolitio	—	—	—	—	—	—	0.19	0.19	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.25	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	365	365	< 0.005	< 0.005	0.85	366
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.81	0.16	10.8	4.90	0.07	0.13	2.75	2.88	0.13	0.77	0.91	—	9,477	9,477	0.65	1.51	14.9	9,959
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	43.4	43.4	< 0.005	< 0.005	0.05	43.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.10	0.02	1.39	0.61	0.01	0.02	0.34	0.35	0.02	0.09	0.11	—	1,169	1,169	0.08	0.19	0.79	1,227
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	0.01	7.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	< 0.005	0.25	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	193	193	0.01	0.03	0.13	203

3.3. Site Preparation (2030) - Unmitigated

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

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

Off-Road Equipment	20.8	17.5	151	171	0.29	6.40	—	6.40	5.89	—	5.89	—	31,774	31,774	1.29	0.26	—	31,883
Dust From Material Movement	—	—	—	—	—	—	10.2	10.2	—	5.25	5.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	0.96	8.29	9.35	0.02	0.35	—	0.35	0.32	—	0.32	—	1,741	1,741	0.07	0.01	—	1,747
Dust From Material Movement	—	—	—	—	—	—	0.56	0.56	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.51	1.71	< 0.005	0.06	—	0.06	0.06	—	0.06	—	288	288	0.01	< 0.005	—	289
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.07	1.45	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	426	426	< 0.005	< 0.005	1.00	428

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.5	22.5	< 0.005	< 0.005	0.02	22.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.73	3.73	< 0.005	< 0.005	< 0.005	3.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2030) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	1.00	5.18	56.6	0.10	0.20	—	0.20	0.20	—	0.20	—	10,591	10,591	0.43	0.09	—	10,628
Dust From Material Movement	—	—	—	—	—	—	10.2	10.2	—	5.25	5.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.28	3.10	0.01	0.01	—	0.01	0.01	—	0.01	—	580	580	0.02	< 0.005	—	582
Dust From Material Movement	—	—	—	—	—	—	0.56	0.56	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.57	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	96.1	96.1	< 0.005	< 0.005	—	96.4
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.07	1.45	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	426	426	< 0.005	< 0.005	1.00	428
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	< 0.005	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.5	22.5	< 0.005	< 0.005	0.02	22.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.73	3.73	< 0.005	< 0.005	< 0.005	3.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2030) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.5	8.86	75.7	104	0.16	3.08	—	3.08	2.83	—	2.83	—	17,754	17,754	0.72	0.14	—	17,815
Dust From Material Movement	—	—	—	—	—	—	3.71	3.71	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.5	8.86	75.7	104	0.16	3.08	—	3.08	2.83	—	2.83	—	17,754	17,754	0.72	0.14	—	17,815
Dust From Material Movement	—	—	—	—	—	—	3.71	3.71	—	1.78	1.78	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.18	2.67	22.8	31.4	0.05	0.93	—	0.93	0.85	—	0.85	—	5,350	5,350	0.22	0.04	—	5,369
Dust From Material Movement	—	—	—	—	—	—	1.12	1.12	—	0.54	0.54	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	4.16	5.72	0.01	0.17	—	0.17	0.16	—	0.16	—	886	886	0.04	0.01	—	889
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.25	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	365	365	< 0.005	< 0.005	0.85	366
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	1.30	0.25	17.3	7.88	0.11	0.22	4.42	4.64	0.22	1.24	1.45	—	15,233	15,233	1.04	2.43	24.0	16,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.07	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	1.28	0.23	17.9	7.95	0.11	0.22	4.42	4.64	0.22	1.24	1.45	—	15,240	15,240	1.04	2.43	0.62	15,992
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.34	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	106	106	< 0.005	< 0.005	0.11	106
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.39	0.07	5.47	2.39	0.03	0.06	1.32	1.38	0.06	0.37	0.44	—	4,592	4,592	0.31	0.73	3.12	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	0.02	17.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.01	1.00	0.44	0.01	0.01	0.24	0.25	0.01	0.07	0.08	—	760	760	0.05	0.12	0.52	798

3.6. Grading (2030) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.57	4.08	35.5	0.05	0.11	—	0.11	0.11	—	0.11	—	5,918	5,918	0.24	0.05	—	5,938
Dust From Material Movement	—	—	—	—	—	—	3.71	3.71	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.57	4.08	35.5	0.05	0.11	—	0.11	0.11	—	0.11	—	5,918	5,918	0.24	0.05	—	5,938

Dust From Material Movement	—	—	—	—	—	—	3.71	3.71	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.17	1.23	10.7	0.02	0.03	—	0.03	0.03	—	0.03	—	1,783	1,783	0.07	0.01	—	1,790
Dust From Material Movement	—	—	—	—	—	—	1.12	1.12	—	0.54	0.54	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	1.95	< 0.005	0.01	—	0.01	0.01	—	0.01	—	295	295	0.01	< 0.005	—	296
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.25	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	365	365	< 0.005	< 0.005	0.85	366
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	1.30	0.25	17.3	7.88	0.11	0.22	4.42	4.64	0.22	1.24	1.45	—	15,233	15,233	1.04	2.43	24.0	16,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.08	0.08	1.07	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	1.28	0.23	17.9	7.95	0.11	0.22	4.42	4.64	0.22	1.24	1.45	—	15,240	15,240	1.04	2.43	0.62	15,992
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.34	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	106	106	< 0.005	< 0.005	0.11	106
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.39	0.07	5.47	2.39	0.03	0.06	1.32	1.38	0.06	0.37	0.44	—	4,592	4,592	0.31	0.73	3.12	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	0.02	17.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.01	1.00	0.44	0.01	0.01	0.24	0.25	0.01	0.07	0.08	—	760	760	0.05	0.12	0.52	798

3.7. Building Construction (2031) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.59	5.51	48.7	77.1	0.14	1.46	—	1.46	1.34	—	1.34	—	14,381	14,381	0.58	0.12	—	14,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.59	5.51	48.7	77.1	0.14	1.46	—	1.46	1.34	—	1.34	—	14,381	14,381	0.58	0.12	—	14,430

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.30	3.60	31.8	50.4	0.09	0.95	—	0.95	0.88	—	0.88	—	9,400	9,400	0.38	0.08	—	9,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.66	5.81	9.19	0.02	0.17	—	0.17	0.16	—	0.16	—	1,556	1,556	0.06	0.01	—	1,562
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.26	2.22	1.91	35.8	0.00	0.00	11.9	11.9	0.00	2.80	2.80	—	10,936	10,936	0.10	0.06	22.9	10,980
Vendor	0.41	0.13	5.47	2.77	0.05	0.05	1.79	1.84	0.05	0.50	0.54	—	5,757	5,757	0.27	0.83	9.51	6,022
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.26	2.20	1.95	30.7	0.00	0.00	11.9	11.9	0.00	2.80	2.80	—	10,411	10,411	0.12	0.06	0.59	10,432
Vendor	0.40	0.13	5.70	2.84	0.05	0.05	1.79	1.84	0.05	0.50	0.54	—	5,761	5,761	0.27	0.83	0.25	6,016
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.44	1.28	20.9	0.00	0.00	7.70	7.70	0.00	1.80	1.80	—	6,897	6,897	0.08	0.04	6.47	6,917
Vendor	0.26	0.09	3.75	1.83	0.03	0.03	1.16	1.19	0.03	0.32	0.35	—	3,764	3,764	0.17	0.55	2.69	3,933
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.27	0.26	0.23	3.82	0.00	0.00	1.41	1.41	0.00	0.33	0.33	—	1,142	1,142	0.01	0.01	1.07	1,145
Vendor	0.05	0.02	0.68	0.33	0.01	0.01	0.21	0.22	0.01	0.06	0.06	—	623	623	0.03	0.09	0.45	651
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	0.00	0.00

3.8. Building Construction (2031) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.05	1.77	13.8	38.3	0.06	0.35	—	0.35	0.32	—	0.32	—	6,039	6,039	0.24	0.05	—	6,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.05	1.77	13.8	38.3	0.06	0.35	—	0.35	0.32	—	0.32	—	6,039	6,039	0.24	0.05	—	6,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.15	9.03	25.0	0.04	0.23	—	0.23	0.21	—	0.21	—	3,947	3,947	0.16	0.03	—	3,961
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.21	1.65	4.57	0.01	0.04	—	0.04	0.04	—	0.04	—	653	653	0.03	0.01	—	656

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.26	2.22	1.91	35.8	0.00	0.00	11.9	11.9	0.00	2.80	2.80	—	10,936	10,936	0.10	0.06	22.9	10,980
Vendor	0.41	0.13	5.47	2.77	0.05	0.05	1.79	1.84	0.05	0.50	0.54	—	5,757	5,757	0.27	0.83	9.51	6,022
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.26	2.20	1.95	30.7	0.00	0.00	11.9	11.9	0.00	2.80	2.80	—	10,411	10,411	0.12	0.06	0.59	10,432
Vendor	0.40	0.13	5.70	2.84	0.05	0.05	1.79	1.84	0.05	0.50	0.54	—	5,761	5,761	0.27	0.83	0.25	6,016
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.44	1.28	20.9	0.00	0.00	7.70	7.70	0.00	1.80	1.80	—	6,897	6,897	0.08	0.04	6.47	6,917
Vendor	0.26	0.09	3.75	1.83	0.03	0.03	1.16	1.19	0.03	0.32	0.35	—	3,764	3,764	0.17	0.55	2.69	3,933
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.26	0.23	3.82	0.00	0.00	1.41	1.41	0.00	0.33	0.33	—	1,142	1,142	0.01	0.01	1.07	1,145
Vendor	0.05	0.02	0.68	0.33	0.01	0.01	0.21	0.22	0.01	0.06	0.06	—	623	623	0.03	0.09	0.45	651
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	0.00	0.00

3.9. Building Construction (2032) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.42	5.37	47.2	76.7	0.14	1.34	—	1.34	1.24	—	1.24	—	14,381	14,381	0.58	0.12	—	14,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.42	5.37	47.2	76.7	0.14	1.34	—	1.34	1.24	—	1.24	—	14,381	14,381	0.58	0.12	—	14,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.83	3.21	28.2	45.8	0.08	0.80	—	0.80	0.74	—	0.74	—	8,584	8,584	0.35	0.07	—	8,613
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.59	5.14	8.36	0.02	0.15	—	0.15	0.13	—	0.13	—	1,421	1,421	0.06	0.01	—	1,426
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.18	2.14	1.52	34.0	0.00	0.00	11.9	11.9	0.00	2.80	2.80	—	10,778	10,778	0.10	0.06	20.0	10,818
Vendor	0.41	0.13	5.25	2.67	0.05	0.05	1.79	1.84	0.05	0.50	0.54	—	5,555	5,555	0.27	0.79	8.23	5,804
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	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.18	2.14	1.93	29.3	0.00	0.00	11.9	11.9	0.00	2.80	2.80	—	10,260	10,260	0.10	0.06	0.52	10,281
Vendor	0.40	0.13	5.48	2.73	0.05	0.05	1.79	1.84	0.05	0.50	0.54	—	5,559	5,559	0.27	0.79	0.21	5,800
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.29	1.27	1.15	18.3	0.00	0.00	7.03	7.03	0.00	1.65	1.65	—	6,207	6,207	0.06	0.04	5.15	6,225
Vendor	0.24	0.08	3.27	1.61	0.03	0.03	1.06	1.09	0.03	0.29	0.32	—	3,316	3,316	0.16	0.47	2.11	3,463
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.23	0.21	3.34	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,028	1,028	0.01	0.01	0.85	1,031
Vendor	0.04	0.01	0.60	0.29	0.01	0.01	0.19	0.20	0.01	0.05	0.06	—	549	549	0.03	0.08	0.35	573
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	0.00	0.00

3.10. Building Construction (2032) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.03	1.74	13.8	38.3	0.06	0.33	—	0.33	0.31	—	0.31	—	6,039	6,039	0.24	0.05	—	6,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.03	1.74	13.8	38.3	0.06	0.33	—	0.33	0.31	—	0.31	—	6,039	6,039	0.24	0.05	—	6,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.04	8.21	22.8	0.04	0.20	—	0.20	0.19	—	0.19	—	3,604	3,604	0.15	0.03	—	3,617
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	1.50	4.17	0.01	0.04	—	0.04	0.03	—	0.03	—	597	597	0.02	< 0.005	—	599
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.18	2.14	1.52	34.0	0.00	0.00	11.9	11.9	0.00	2.80	2.80	—	10,778	10,778	0.10	0.06	20.0	10,818
Vendor	0.41	0.13	5.25	2.67	0.05	0.05	1.79	1.84	0.05	0.50	0.54	—	5,555	5,555	0.27	0.79	8.23	5,804
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.18	2.14	1.93	29.3	0.00	0.00	11.9	11.9	0.00	2.80	2.80	—	10,260	10,260	0.10	0.06	0.52	10,281
Vendor	0.40	0.13	5.48	2.73	0.05	0.05	1.79	1.84	0.05	0.50	0.54	—	5,559	5,559	0.27	0.79	0.21	5,800
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.29	1.27	1.15	18.3	0.00	0.00	7.03	7.03	0.00	1.65	1.65	—	6,207	6,207	0.06	0.04	5.15	6,225
Vendor	0.24	0.08	3.27	1.61	0.03	0.03	1.06	1.09	0.03	0.29	0.32	—	3,316	3,316	0.16	0.47	2.11	3,463

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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.23	0.21	3.34	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,028	1,028	0.01	0.01	0.85	1,031
Vendor	0.04	0.01	0.60	0.29	0.01	0.01	0.19	0.20	0.01	0.05	0.06	—	549	549	0.03	0.08	0.35	573
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	0.00	0.00

3.11. Paving (2030) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.60	3.86	37.7	59.4	0.08	1.32	—	1.32	1.22	—	1.22	—	9,064	9,064	0.37	0.07	—	9,095
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	6.78	10.7	0.02	0.24	—	0.24	0.22	—	0.22	—	1,632	1,632	0.07	0.01	—	1,637
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.24	1.95	< 0.005	0.04	—	0.04	0.04	—	0.04	—	270	270	0.01	< 0.005	—	271

Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.07	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.4	63.4	< 0.005	< 0.005	0.07	63.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.01	10.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2030) - Mitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.70	3.82	0.01	0.01	—	0.01	0.01	—	0.01	—	544	544	0.02	< 0.005	—	546
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.13	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	90.1	90.1	< 0.005	< 0.005	—	90.4
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.07	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.4	63.4	< 0.005	< 0.005	0.07	63.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.01	10.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2031) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.48	3.77	36.8	59.3	0.08	1.26	—	1.26	1.16	—	1.16	—	9,064	9,064	0.37	0.07	—	9,095
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.48	3.77	36.8	59.3	0.08	1.26	—	1.26	1.16	—	1.16	—	9,064	9,064	0.37	0.07	—	9,095
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.86	1.56	15.2	24.6	0.03	0.52	—	0.52	0.48	—	0.48	—	3,760	3,760	0.15	0.03	—	3,773
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.78	4.49	0.01	0.10	—	0.10	0.09	—	0.09	—	623	623	0.03	0.01	—	625
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.18	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	359	359	< 0.005	< 0.005	0.75	361
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.01	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	342	342	< 0.005	< 0.005	0.02	343
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	144	144	< 0.005	< 0.005	0.14	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.8	23.8	< 0.005	< 0.005	0.02	23.9

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Paving (2031) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.60	8.80	0.01	0.02	—	0.02	0.02	—	0.02	—	1,253	1,253	0.05	0.01	—	1,258
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.29	1.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	208	208	0.01	< 0.005	—	208
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.18	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	359	359	< 0.005	< 0.005	0.75	361
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.01	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	342	342	< 0.005	< 0.005	0.02	343
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	144	144	< 0.005	< 0.005	0.14	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.8	23.8	< 0.005	< 0.005	0.02	23.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2032) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.56	4.62	6.60	0.01	0.05	—	0.05	0.04	—	0.04	—	801	801	0.03	0.01	—	804
Architectural Coatings	—	119	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.56	4.62	6.60	0.01	0.05	—	0.05	0.04	—	0.04	—	801	801	0.03	0.01	—	804
Architectural Coatings	—	119	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.39	1.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	241	241	0.01	< 0.005	—	242
Architectural Coatings	—	36.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.25	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.0	40.0	< 0.005	< 0.005	—	40.1

Architect Coatings	—	6.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.30	6.81	0.00	0.00	2.39	2.39	0.00	0.56	0.56	—	2,156	2,156	0.02	0.01	4.00	2,164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.39	5.86	0.00	0.00	2.39	2.39	0.00	0.56	0.56	—	2,052	2,052	0.02	0.01	0.10	2,056
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.12	1.85	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	627	627	0.01	< 0.005	0.52	629
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	104	104	< 0.005	< 0.005	0.09	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2032) - Mitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.29	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	267	267	0.01	< 0.005	—	268
Architectural Coatings	—	23.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.29	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	267	267	0.01	< 0.005	—	268
Architectural Coatings	—	23.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.39	0.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	80.5	80.5	< 0.005	< 0.005	—	80.7
Architectural Coatings	—	7.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.07	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.4

Architectural Coatings	—	1.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.30	6.81	0.00	0.00	2.39	2.39	0.00	0.56	0.56	—	2,156	2,156	0.02	0.01	4.00	2,164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.39	5.86	0.00	0.00	2.39	2.39	0.00	0.56	0.56	—	2,052	2,052	0.02	0.01	0.10	2,056
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.12	1.85	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	627	627	0.01	< 0.005	0.52	629
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	104	104	< 0.005	< 0.005	0.09	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	10.4	9.48	5.88	77.1	0.22	0.10	9.11	9.21	0.10	1.61	1.71	—	22,268	22,268	0.90	0.83	34.0	22,571
Regional Shopping Center	5.51	5.21	2.32	26.7	0.06	0.03	2.51	2.55	0.03	0.45	0.48	—	6,346	6,346	0.38	0.30	9.39	6,455
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	15.9	14.7	8.20	104	0.28	0.14	11.6	11.8	0.13	2.06	2.18	—	28,614	28,614	1.27	1.13	43.4	29,026
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	10.3	9.45	6.39	71.9	0.21	0.10	9.11	9.21	0.10	1.61	1.71	—	21,414	21,414	0.93	0.87	0.88	21,696
Regional Shopping Center	5.51	5.20	2.51	26.2	0.06	0.03	2.51	2.55	0.03	0.45	0.48	—	6,113	6,113	0.40	0.32	0.24	6,218

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	15.8	14.6	8.90	98.1	0.27	0.14	11.6	11.8	0.13	2.06	2.18	—	27,527	27,527	1.33	1.18	1.13	27,914
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	1.87	1.71	1.17	13.4	0.04	0.02	1.66	1.68	0.02	0.29	0.31	—	3,583	3,583	0.15	0.14	2.43	3,633
Regional Shopping Center	0.99	0.93	0.44	4.63	0.01	0.01	0.42	0.43	0.01	0.08	0.08	—	950	950	0.06	0.05	0.62	967
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	2.85	2.64	1.62	18.0	0.05	0.02	2.09	2.11	0.02	0.37	0.39	—	4,534	4,534	0.22	0.19	3.05	4,600

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	7.25	6.64	4.12	54.0	0.15	0.07	6.38	6.45	0.07	1.13	1.20	—	15,588	15,588	0.63	0.58	23.8	15,800

Regional Shopping Center	5.39	5.09	2.26	26.1	0.06	0.03	2.46	2.49	0.03	0.43	0.46	—	6,201	6,201	0.37	0.30	9.17	6,308
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	12.6	11.7	6.38	80.1	0.21	0.10	8.83	8.94	0.10	1.56	1.66	—	21,789	21,789	1.00	0.88	33.0	22,108
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	7.23	6.61	4.47	50.3	0.15	0.07	6.38	6.45	0.07	1.13	1.20	—	14,990	14,990	0.65	0.61	0.62	15,188
Regional Shopping Center	5.38	5.08	2.45	25.6	0.06	0.03	2.46	2.49	0.03	0.43	0.46	—	5,973	5,973	0.39	0.31	0.24	6,076
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	12.6	11.7	6.93	75.9	0.21	0.10	8.83	8.94	0.10	1.56	1.66	—	20,963	20,963	1.04	0.92	0.86	21,263
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	1.31	1.20	0.82	9.40	0.03	0.01	1.16	1.18	0.01	0.21	0.22	—	2,508	2,508	0.11	0.10	1.70	2,543
Regional Shopping Center	0.96	0.91	0.43	4.52	0.01	0.01	0.41	0.42	0.01	0.07	0.08	—	928	928	0.06	0.05	0.61	945

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	2.27	2.11	1.25	13.9	0.04	0.02	1.58	1.60	0.02	0.28	0.30	—	3,437	3,437	0.17	0.15	2.31	3,488

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	4,574	4,574	0.28	0.03	—	4,591
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	930	930	0.06	0.01	—	934
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	3,529	3,529	0.22	0.03	—	3,543
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,033	9,033	0.56	0.07	—	9,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	4,574	4,574	0.28	0.03	—	4,591
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	930	930	0.06	0.01	—	934
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	3,529	3,529	0.22	0.03	—	3,543
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,033	9,033	0.56	0.07	—	9,068
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	757	757	0.05	0.01	—	760
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	154	154	0.01	< 0.005	—	155
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	584	584	0.04	< 0.005	—	587
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,496	1,496	0.09	0.01	—	1,501

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	4,553	4,553	0.28	0.03	—	4,570
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	846	846	0.05	0.01	—	849
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	3,556	3,556	0.22	0.03	—	3,570
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,955	8,955	0.56	0.07	—	8,989
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	4,519	4,519	0.28	0.03	—	4,536
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	843	843	0.05	0.01	—	846
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	3,529	3,529	0.22	0.03	—	3,543
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,891	8,891	0.55	0.07	—	8,925
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	752	752	0.05	0.01	—	755
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	140	140	0.01	< 0.005	—	140
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	587	587	0.04	< 0.005	—	590
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,479	1,479	0.09	0.01	—	1,485

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.28	0.14	2.40	1.02	0.02	0.19	—	0.19	0.19	—	0.19	—	3,047	3,047	0.27	0.01	—	3,055
Regional Shopping Center	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	125	125	0.01	< 0.005	—	125
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.29	0.15	2.51	1.11	0.02	0.20	—	0.20	0.20	—	0.20	—	3,172	3,172	0.28	0.01	—	3,181

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.28	0.14	2.40	1.02	0.02	0.19	—	0.19	0.19	—	0.19	—	3,047	3,047	0.27	0.01	—	3,055
Regional Shopping Center	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	125	125	0.01	< 0.005	—	125
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.29	0.15	2.51	1.11	0.02	0.20	—	0.20	0.20	—	0.20	—	3,172	3,172	0.28	0.01	—	3,181
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.03	0.44	0.19	< 0.005	0.04	—	0.04	0.04	—	0.04	—	504	504	0.04	< 0.005	—	506
Regional Shopping Center	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.6	20.6	< 0.005	< 0.005	—	20.7
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.05	0.03	0.46	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	525	525	0.05	< 0.005	—	527

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.25	0.12	2.13	0.91	0.01	0.17	—	0.17	0.17	—	0.17	—	2,700	2,700	0.24	0.01	—	2,708
Regional Shopping Center	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	124	124	0.01	< 0.005	—	124
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.26	0.13	2.23	0.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,824	2,824	0.25	0.01	—	2,832
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.25	0.12	2.13	0.91	0.01	0.17	—	0.17	0.17	—	0.17	—	2,700	2,700	0.24	0.01	—	2,708
Regional Shopping Center	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	124	124	0.01	< 0.005	—	124
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.26	0.13	2.23	0.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,824	2,824	0.25	0.01	—	2,832

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.02	0.39	0.17	< 0.005	0.03	—	0.03	0.03	—	0.03	—	447	447	0.04	< 0.005	—	448
Regional Shopping Center	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.5	20.5	< 0.005	< 0.005	—	20.5
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.05	0.02	0.41	0.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	467	467	0.04	< 0.005	—	469

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	21.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	10.0	9.35	0.71	80.1	< 0.005	0.06	—	0.06	0.08	—	0.08	—	259	259	0.01	< 0.005	—	260
Total	10.0	32.7	0.71	80.1	< 0.005	0.06	—	0.06	0.08	—	0.08	0.00	259	259	0.01	< 0.005	—	260
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	21.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	23.3	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	3.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.25	1.17	0.09	10.0	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.3	29.3	< 0.005	< 0.005	—	29.5
Total	1.25	5.43	0.09	10.0	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	29.3	29.3	< 0.005	< 0.005	—	29.5

4.3.1. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	21.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	21.9	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	21.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	21.9	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	3.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	4.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	61.6	319	380	6.33	0.15	—	584
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	9.23	47.8	57.0	0.95	0.02	—	87.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	61.6	319	380	6.33	0.15	—	584
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	9.23	47.8	57.0	0.95	0.02	—	87.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	10.2	52.8	63.0	1.05	0.03	—	96.7
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1.53	7.91	9.44	0.16	< 0.005	—	14.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	11.7	60.7	72.4	1.21	0.03	—	111

4.4.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	61.6	319	380	6.33	0.15	—	584
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	9.23	47.8	57.0	0.95	0.02	—	87.5

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	61.6	319	380	6.33	0.15	—	584
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	9.23	47.8	57.0	0.95	0.02	—	87.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	70.8	366	437	7.28	0.18	—	671
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	10.2	52.8	63.0	1.05	0.03	—	96.7
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1.53	7.91	9.44	0.16	< 0.005	—	14.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	11.7	60.7	72.4	1.21	0.03	—	111

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,194
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	36.8	0.00	36.8	3.68	0.00	—	129
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,194

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	36.8	0.00	36.8	3.68	0.00	—	129
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	56.5	0.00	56.5	5.65	0.00	—	198
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	6.09	0.00	6.09	0.61	0.00	—	21.3
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	62.6	0.00	62.6	6.25	0.00	—	219

4.5.1. Mitigated

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

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

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,194
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	36.8	0.00	36.8	3.68	0.00	—	129
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,194
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	36.8	0.00	36.8	3.68	0.00	—	129
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	378	0.00	378	37.8	0.00	—	1,322
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	56.5	0.00	56.5	5.65	0.00	—	198

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	6.09	0.00	6.09	0.61	0.00	—	21.3
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	62.6	0.00	62.6	6.25	0.00	—	219

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.74	6.74
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.74	6.74

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.74	6.74
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.74	6.74

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.06	7.06
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	4/1/2030	5/31/2030	5.00	45.0	—
Site Preparation	Site Preparation	6/1/2030	6/30/2030	5.00	20.0	—
Grading	Grading	7/1/2030	11/30/2030	5.00	110	—
Building Construction	Building Construction	2/1/2031	10/31/2032	5.00	455	—
Paving	Paving	10/1/2030	7/31/2031	5.00	218	—
Architectural Coating	Architectural Coating	8/1/2032	12/31/2032	5.00	110	—

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	1.00	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	Tractors/Loaders/Backhoes	Diesel	Average	3.00	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
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
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	1.00	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	Tractors/Loaders/Backhoes	Diesel	Average	3.00	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
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Demolition	—	—	—	—
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	152	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	30.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	244	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	913	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	210	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	183	18.5	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	152	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	30.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	244	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	913	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	210	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—

Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	183	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

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

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	1,906,740	635,580	102,714	33,079	8,154
Architectural Coating	1,906,740	635,580	102,714	33,079	8,154

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	27,346	—
Site Preparation	—	—	60.0	0.00	—
Grading	—	214,906	40.0	0.00	—
Paving	0.00	0.00	0.00	0.00	5.30

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
Apartments Mid Rise	—	0%
Apartments Mid Rise	—	0%
Regional Shopping Center	0.00	0%
Enclosed Parking with Elevator	2.66	100%
Other Asphalt Surfaces	2.64	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00	261	0.03	< 0.005
2031	0.00	261	0.03	< 0.005
2032	0.00	261	0.03	< 0.005

2032	0.00	261	0.03	< 0.005
2032	0.00	261	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	3,886	3,886	3,886	1,418,478	32,931	32,931	32,931	12,019,755
Regional Shopping Center	2,406	2,406	2,406	878,299	8,134	9,090	9,090	3,068,622
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	2,720	2,720	2,720	992,934	23,052	23,052	23,052	8,413,828
Regional Shopping Center	2,351	2,351	2,351	858,283	7,949	8,883	8,883	2,998,690
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	86
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	86
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1906740	635,580	102,714	33,079	8,154

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)
Apartments Mid Rise	3,137,954	532	0.0330	0.0040	9,507,458
Regional Shopping Center	638,389	532	0.0330	0.0040	389,151
Enclosed Parking with Elevator	2,421,579	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	3,100,486	532	0.0330	0.0040	8,424,903
Regional Shopping Center	578,292	532	0.0330	0.0040	385,840
Enclosed Parking with Elevator	2,421,579	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	32,121,956	0.00
Regional Shopping Center	4,814,714	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	32,121,956	0.00
Regional Shopping Center	4,814,714	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

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

Apartments Mid Rise	633.01	0.00
Regional Shopping Center	68.25	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	633.01	0.00
Regional Shopping Center	68.25	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

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

Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.23	annual days of extreme heat
Extreme Precipitation	3.60	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	53.7
AQ-PM	59.2
AQ-DPM	30.6
Drinking Water	44.6
Lead Risk Housing	34.5
Pesticides	0.00
Toxic Releases	86.8
Traffic	55.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	47.4
Haz Waste Facilities/Generators	74.7
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	42.3
Cardio-vascular	34.4
Low Birth Weights	36.7
Socioeconomic Factor Indicators	—
Education	43.4
Housing	53.6
Linguistic	37.7
Poverty	50.2

Unemployment	3.58

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	59.19414859
Employed	97.42076222
Median HI	59.19414859
Education	—
Bachelor's or higher	73.0784037
High school enrollment	100
Preschool enrollment	9.713845759
Transportation	—
Auto Access	57.21801617
Active commuting	16.10419607
Social	—
2-parent households	16.88694983
Voting	23.36712434
Neighborhood	—
Alcohol availability	51.4307712
Park access	41.76825356
Retail density	84.88387014
Supermarket access	69.88322854
Tree canopy	67.77877582
Housing	—
Homeownership	21.2498396

Housing habitability	46.43911202
Low-inc homeowner severe housing cost burden	27.30655717
Low-inc renter severe housing cost burden	80.90594123
Uncrowded housing	40.60053895
Health Outcomes	—
Insured adults	46.18247145
Arthritis	92.6
Asthma ER Admissions	65.9
High Blood Pressure	92.0
Cancer (excluding skin)	60.5
Asthma	80.2
Coronary Heart Disease	91.8
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	90.6
Life Expectancy at Birth	65.4
Cognitively Disabled	35.0
Physically Disabled	85.5
Heart Attack ER Admissions	71.9
Mental Health Not Good	73.6
Chronic Kidney Disease	93.4
Obesity	86.0
Pedestrian Injuries	44.9
Physical Health Not Good	85.2
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	10.6
Current Smoker	71.8

No Leisure Time for Physical Activity	71.9
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	71.1
Elderly	60.7
English Speaking	61.5
Foreign-born	71.2
Outdoor Workers	41.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.4
Traffic Density	53.3
Traffic Access	57.9
Other Indices	—
Hardship	23.6
Other Decision Support	—
2016 Voting	60.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	34.0
Healthy Places Index Score for Project Location (b)	57.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Adjusted per project specific details. Landscape area included in Phase 1.
Construction: Construction Phases	anticipated construction schedule
Construction: Paving	other asphalt surfaces increased to capture all potential paved areas
Operations: Vehicle Data	trip generation per traffic study
Operations: Hearths	No wood burning per SCAQMD Rule 445
Construction: Dust From Material Movement	Excavation export

Bristol Phase 3 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bristol Phase 3
Construction Start Date	1/1/2033
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	33.698543616352495, -117.887579136088
County	Orange
City	Santa Ana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5946
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.8

1.2. Land Use Types

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

Apartments Mid Rise	1,519	Dwelling Unit	7.96	1,670,920	0.00	—	4,527	—
Regional Shopping Center	35.0	1000sqft	0.17	35,000	0.00	—	—	—
Enclosed Parking with Elevator	1,028	1000sqft	4.90	1,028,000	0.00	—	—	—
Other Asphalt Surfaces	150	1000sqft	0.71	0.00	0.00	—	—	—
City Park	2.69	Acre	2.69	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
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction
Transportation	T-1	Increase Residential Density
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-31-A*	Locate Project in Area with High Destination Accessibility
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Energy	E-2	Require Energy Efficient Appliances
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

* 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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.4	103	186	292	0.88	5.44	91.9	93.2	5.09	22.0	23.3	—	116,437	116,437	5.52	10.9	120	118,191
Mit.	17.9	22.8	83.4	254	0.64	1.28	91.9	92.5	1.28	22.0	22.6	—	108,095	108,095	4.45	10.7	120	109,821
% Reduced	23%	78%	55%	13%	28%	76%	—	1%	75%	—	3%	—	7%	7%	19%	2%	—	7%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.7	122	189	297	0.91	5.44	108	109	5.09	25.8	27.0	—	125,278	125,278	5.52	10.9	3.64	126,855
Mit.	20.1	38.2	86.4	255	0.66	1.28	108	109	1.28	25.8	26.4	—	116,402	116,402	4.45	10.7	3.64	117,948
% Reduced	19%	69%	54%	14%	27%	76%	—	1%	75%	—	2%	—	7%	7%	19%	2%	—	7%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.6	34.1	128	193	0.59	3.67	64.8	65.8	3.43	15.5	16.4	—	81,422	81,422	3.61	7.28	37.1	82,629
Mit.	12.6	11.2	58.2	166	0.44	0.84	64.8	65.2	0.84	15.5	15.9	—	75,464	75,464	2.94	7.15	37.1	76,650
% Reduced	19%	67%	55%	14%	26%	77%	—	1%	75%	—	3%	—	7%	7%	18%	2%	—	7%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.84	6.23	23.4	35.3	0.11	0.67	11.8	12.0	0.63	2.83	3.00	—	13,480	13,480	0.60	1.21	6.14	13,680
Mit.	2.29	2.04	10.6	30.4	0.08	0.15	11.8	11.9	0.15	2.83	2.91	—	12,494	12,494	0.49	1.18	6.14	12,690
% Reduced	19%	67%	55%	14%	26%	77%	—	1%	75%	—	3%	—	7%	7%	18%	2%	—	7%

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2033	23.4	16.6	186	190	0.88	5.44	28.1	33.5	5.09	8.34	13.4	—	108,595	108,595	5.52	10.9	85.8	112,080
2034	4.37	3.82	35.3	63.0	0.08	1.06	1.57	2.63	0.98	0.37	1.34	—	10,447	10,447	0.38	0.08	1.99	10,483
2035	22.0	19.3	83.9	292	0.44	1.38	91.9	93.2	1.29	22.0	23.3	—	116,437	116,437	2.51	5.27	120	118,191
2036	3.29	103	6.50	44.9	0.01	0.03	16.1	16.1	0.03	3.77	3.79	—	14,687	14,687	0.14	0.09	15.1	14,732
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2033	23.3	16.5	189	190	0.91	5.44	36.0	40.4	5.09	8.34	13.4	—	108,540	108,540	5.52	10.9	2.24	111,941
2034	22.8	19.5	181	272	0.91	5.11	91.9	93.3	4.78	22.0	23.4	—	114,986	114,986	5.50	10.9	3.64	116,627
2035	21.6	19.0	85.7	264	0.44	1.38	91.9	93.2	1.29	22.0	23.3	—	113,101	113,101	2.64	5.27	3.11	114,741
2036	24.7	122	89.9	297	0.45	1.34	108	109	1.26	25.8	27.0	—	125,278	125,278	2.65	5.06	3.05	126,855
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2033	15.6	11.0	128	123	0.59	3.67	20.7	24.4	3.43	5.76	9.20	—	70,508	70,508	3.61	7.28	24.8	72,792
2034	6.36	5.33	40.4	78.4	0.15	1.05	13.3	14.4	0.97	3.29	4.27	—	25,866	25,866	0.85	1.34	9.69	26,296
2035	15.5	13.6	61.2	193	0.32	0.99	64.8	65.8	0.92	15.5	16.4	—	81,422	81,422	1.89	3.77	37.1	82,629
2036	4.80	34.1	16.8	59.3	0.08	0.24	20.9	21.1	0.23	4.98	5.21	—	24,211	24,211	0.49	0.91	9.84	24,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2033	2.84	2.01	23.4	22.5	0.11	0.67	3.78	4.45	0.63	1.05	1.68	—	11,673	11,673	0.60	1.21	4.11	12,052
2034	1.16	0.97	7.37	14.3	0.03	0.19	2.44	2.63	0.18	0.60	0.78	—	4,282	4,282	0.14	0.22	1.60	4,354
2035	2.83	2.48	11.2	35.3	0.06	0.18	11.8	12.0	0.17	2.83	3.00	—	13,480	13,480	0.31	0.62	6.14	13,680
2036	0.88	6.23	3.06	10.8	0.01	0.04	3.81	3.86	0.04	0.91	0.95	—	4,008	4,008	0.08	0.15	1.63	4,057

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2033	6.81	2.85	83.4	110	0.64	1.28	28.1	29.4	1.28	8.34	9.62	—	82,210	82,210	4.45	10.7	85.8	85,605
2034	0.59	0.69	4.06	25.3	0.03	0.06	1.57	1.62	0.06	0.37	0.42	—	4,405	4,405	0.13	0.03	1.99	4,420
2035	17.9	15.9	53.5	254	0.37	0.61	91.9	92.5	0.59	22.0	22.6	—	108,095	108,095	2.17	5.20	120	109,821
2036	2.68	22.8	3.28	40.2	< 0.005	< 0.005	16.1	16.1	< 0.005	3.77	3.77	—	14,153	14,153	0.12	0.08	15.1	14,196
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2033	6.71	2.75	86.4	109	0.66	1.28	36.0	37.1	1.28	8.34	9.62	—	82,155	82,155	4.45	10.7	2.24	85,466
2034	18.0	16.0	83.6	234	0.66	1.28	91.9	92.5	1.28	22.0	22.6	—	106,644	106,644	4.43	10.7	3.64	108,256
2035	17.6	15.6	55.3	226	0.37	0.61	91.9	92.5	0.59	22.0	22.6	—	104,759	104,759	2.31	5.20	3.11	106,371
2036	20.1	38.2	57.5	255	0.37	0.61	108	109	0.59	25.8	26.4	—	116,402	116,402	2.29	4.99	3.05	117,948
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2033	4.47	1.82	58.2	69.4	0.44	0.84	20.7	21.6	0.84	5.76	6.61	—	54,145	54,145	2.94	7.15	24.8	56,373
2034	2.85	2.44	14.0	48.8	0.10	0.18	13.3	13.5	0.18	3.29	3.47	—	20,042	20,042	0.62	1.29	9.69	20,451
2035	12.6	11.2	39.4	166	0.26	0.43	64.8	65.2	0.42	15.5	15.9	—	75,464	75,464	1.65	3.72	37.1	76,650
2036	3.91	9.56	10.6	51.2	0.07	0.11	20.9	21.0	0.11	4.98	5.09	—	22,566	22,566	0.42	0.90	9.84	22,854
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2033	0.82	0.33	10.6	12.7	0.08	0.15	3.78	3.93	0.15	1.05	1.21	—	8,964	8,964	0.49	1.18	4.11	9,333
2034	0.52	0.44	2.55	8.90	0.02	0.03	2.44	2.47	0.03	0.60	0.63	—	3,318	3,318	0.10	0.21	1.60	3,386
2035	2.29	2.04	7.20	30.4	0.05	0.08	11.8	11.9	0.08	2.83	2.91	—	12,494	12,494	0.27	0.62	6.14	12,690
2036	0.71	1.75	1.93	9.35	0.01	0.02	3.81	3.83	0.02	0.91	0.93	—	3,736	3,736	0.07	0.15	1.63	3,784

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.0	71.6	33.6	288	0.55	2.01	17.5	19.5	2.03	3.10	5.13	740	76,732	77,472	79.3	2.01	59.9	80,113
Mit.	17.3	51.5	27.0	114	0.42	1.67	12.6	14.3	1.67	2.23	3.90	740	61,357	62,097	78.5	1.57	46.6	64,574
% Reduced	56%	28%	20%	60%	25%	17%	28%	27%	18%	28%	24%	—	20%	20%	1%	22%	22%	19%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22.9	56.5	33.3	146	0.53	1.92	17.5	19.4	1.91	3.10	5.01	740	74,706	75,445	79.3	2.08	13.4	78,061
Mit.	17.2	51.5	27.7	107	0.41	1.67	12.6	14.3	1.67	2.23	3.90	740	60,148	60,888	78.5	1.62	13.0	63,348
% Reduced	25%	9%	17%	26%	24%	13%	28%	26%	13%	28%	22%	—	19%	19%	1%	22%	3%	19%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	33.7	66.6	34.2	239	0.54	1.98	17.4	19.4	1.99	3.08	5.07	740	75,198	75,937	79.3	2.08	32.6	78,572
Mit.	17.1	51.3	27.7	109	0.41	1.67	12.5	14.2	1.66	2.22	3.88	740	60,272	61,011	78.5	1.62	26.9	63,484
% Reduced	49%	23%	19%	54%	24%	16%	28%	27%	16%	28%	23%	—	20%	20%	1%	22%	18%	19%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.15	12.2	6.24	43.6	0.10	0.36	3.18	3.54	0.36	0.56	0.93	122	12,450	12,572	13.1	0.34	5.40	13,008
Mit.	3.12	9.36	5.06	19.9	0.07	0.31	2.29	2.59	0.30	0.40	0.71	122	9,979	10,101	13.0	0.27	4.45	10,510
% Reduced	49%	23%	19%	54%	24%	16%	28%	27%	16%	28%	23%	—	20%	20%	1%	22%	18%	19%

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.4	18.7	10.9	146	0.41	0.18	17.5	17.7	0.17	3.10	3.27	—	41,783	41,783	1.71	1.57	47.8	42,341
Area	16.1	51.6	1.18	133	0.01	0.09	—	0.09	0.12	—	0.12	0.00	421	421	0.02	< 0.005	—	422
Energy	2.52	1.26	21.5	9.25	0.14	1.74	—	1.74	1.74	—	1.74	—	34,239	34,239	3.29	0.16	—	34,368
Water	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782
Waste	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Total	39.0	71.6	33.6	288	0.55	2.01	17.5	19.5	2.03	3.10	5.13	740	76,732	77,472	79.3	2.01	59.9	80,113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.3	18.7	11.8	136	0.39	0.18	17.5	17.7	0.17	3.10	3.27	—	40,177	40,177	1.77	1.64	1.24	40,711
Area	0.00	36.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	2.52	1.26	21.5	9.25	0.14	1.74	—	1.74	1.74	—	1.74	—	34,239	34,239	3.29	0.16	—	34,368
Water	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782
Waste	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Total	22.9	56.5	33.3	146	0.53	1.92	17.5	19.4	1.91	3.10	5.01	740	74,706	75,445	79.3	2.08	13.4	78,061
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.1	18.5	11.8	139	0.40	0.18	17.4	17.6	0.17	3.08	3.25	—	40,381	40,381	1.75	1.64	20.5	40,933
Area	11.0	46.8	0.81	91.0	< 0.005	0.06	—	0.06	0.08	—	0.08	0.00	288	288	0.01	< 0.005	—	289
Energy	2.52	1.26	21.5	9.25	0.14	1.74	—	1.74	1.74	—	1.74	—	34,239	34,239	3.29	0.16	—	34,368
Water	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782

Waste	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Total	33.7	66.6	34.2	239	0.54	1.98	17.4	19.4	1.99	3.08	5.07	740	75,198	75,937	79.3	2.08	32.6	78,572
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.67	3.37	2.16	25.3	0.07	0.03	3.18	3.21	0.03	0.56	0.59	—	6,685	6,685	0.29	0.27	3.39	6,777
Area	2.01	8.55	0.15	16.6	< 0.005	0.01	—	0.01	0.02	—	0.02	0.00	47.7	47.7	< 0.005	< 0.005	—	47.9
Energy	0.46	0.23	3.93	1.69	0.03	0.32	—	0.32	0.32	—	0.32	—	5,669	5,669	0.55	0.03	—	5,690
Water	—	—	—	—	—	—	—	—	—	—	—	18.9	48.0	66.9	1.94	0.05	—	129
Waste	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.3	0.00	—	362
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.01	2.01
Total	6.15	12.2	6.24	43.6	0.10	0.36	3.18	3.54	0.36	0.56	0.93	122	12,450	12,572	13.1	0.34	5.40	13,008

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.0	13.8	7.93	106	0.30	0.13	12.6	12.8	0.12	2.23	2.36	—	30,169	30,169	1.25	1.14	34.5	30,575
Area	0.00	36.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	2.23	1.12	19.1	8.22	0.12	1.54	—	1.54	1.54	—	1.54	—	30,898	30,898	2.99	0.15	—	31,017
Water	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782
Waste	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Total	17.3	51.5	27.0	114	0.42	1.67	12.6	14.3	1.67	2.23	3.90	740	61,357	62,097	78.5	1.57	46.6	64,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.0	13.8	8.62	99.2	0.28	0.13	12.6	12.8	0.12	2.23	2.36	—	29,011	29,011	1.29	1.19	0.89	29,400

Area	0.00	36.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	2.23	1.12	19.1	8.22	0.12	1.54	—	1.54	1.54	—	1.54	—	30,847	30,847	2.98	0.15	—	30,966
Water	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782
Waste	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Total	17.2	51.5	27.7	107	0.41	1.67	12.6	14.3	1.67	2.23	3.90	740	60,148	60,888	78.5	1.62	13.0	63,348
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.9	13.7	8.62	101	0.29	0.13	12.5	12.7	0.12	2.22	2.34	—	29,100	29,100	1.28	1.19	14.8	29,501
Area	0.00	36.5	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	2.23	1.12	19.1	8.22	0.12	1.54	—	1.54	1.54	—	1.54	—	30,882	30,882	2.99	0.15	—	31,001
Water	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782
Waste	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Total	17.1	51.3	27.7	109	0.41	1.67	12.5	14.2	1.66	2.22	3.88	740	60,272	61,011	78.5	1.62	26.9	63,484
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.71	2.49	1.57	18.4	0.05	0.02	2.29	2.31	0.02	0.40	0.43	—	4,818	4,818	0.21	0.20	2.44	4,884
Area	0.00	6.67	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.41	0.20	3.49	1.50	0.02	0.28	—	0.28	0.28	—	0.28	—	5,113	5,113	0.49	0.02	—	5,133
Water	—	—	—	—	—	—	—	—	—	—	—	18.9	48.0	66.9	1.94	0.05	—	129
Waste	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.3	0.00	—	362
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.01	2.01
Total	3.12	9.36	5.06	19.9	0.07	0.31	2.29	2.59	0.30	0.40	0.71	122	9,979	10,101	13.0	0.27	4.45	10,510

3. Construction Emissions Details

3.1. Demolition (2033) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	13.3	11.2	93.0	95.6	0.20	3.43	—	3.43	3.16	—	3.16	—	20,559	20,559	0.83	0.17	—	20,630
Demolition	—	—	—	—	—	—	14.9	14.9	—	2.26	2.26	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.33	1.96	16.3	16.8	0.03	0.60	—	0.60	0.55	—	0.55	—	3,605	3,605	0.15	0.03	—	3,617
Demolition	—	—	—	—	—	—	2.62	2.62	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	2.98	3.06	0.01	0.11	—	0.11	0.10	—	0.10	—	597	597	0.02	< 0.005	—	599
Demolition	—	—	—	—	—	—	0.48	0.48	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.25	3.67	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,332	1,332	0.01	0.01	0.06	1,335
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	4.67	1.02	71.2	31.0	0.50	0.95	19.5	20.5	0.95	5.48	6.43	—	61,945	61,945	3.59	9.78	1.99	64,952
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.67	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	237	237	< 0.005	< 0.005	0.17	237
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.83	0.19	12.6	5.40	0.09	0.17	3.39	3.56	0.17	0.95	1.12	—	10,858	10,858	0.63	1.72	5.80	11,391
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	39.2	39.2	< 0.005	< 0.005	0.03	39.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	0.03	2.29	0.98	0.02	0.03	0.62	0.65	0.03	0.17	0.20	—	1,798	1,798	0.10	0.28	0.96	1,886

3.2. Demolition (2033) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	9.01	36.3	0.07	0.13	—	0.13	0.13	—	0.13	—	6,853	6,853	0.28	0.06	—	6,877
Demolition	—	—	—	—	—	—	14.9	14.9	—	2.26	2.26	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.58	6.37	0.01	0.02	—	0.02	0.02	—	0.02	—	1,202	1,202	0.05	0.01	—	1,206
Demolition	—	—	—	—	—	—	2.62	2.62	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.29	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	199	199	0.01	< 0.005	—	200
Demolition	—	—	—	—	—	—	0.48	0.48	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.25	3.67	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,332	1,332	0.01	0.01	0.06	1,335
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	4.67	1.02	71.2	31.0	0.50	0.95	19.5	20.5	0.95	5.48	6.43	—	61,945	61,945	3.59	9.78	1.99	64,952
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.67	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	237	237	< 0.005	< 0.005	0.17	237
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.83	0.19	12.6	5.40	0.09	0.17	3.39	3.56	0.17	0.95	1.12	—	10,858	10,858	0.63	1.72	5.80	11,391

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	39.2	39.2	< 0.005	< 0.005	0.03	39.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	0.03	2.29	0.98	0.02	0.03	0.62	0.65	0.03	0.17	0.20	—	1,798	1,798	0.10	0.28	0.96	1,886

3.3. Site Preparation (2033) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	18.8	15.8	127	146	0.29	5.17	—	5.17	4.76	—	4.76	—	31,776	31,776	1.29	0.26	—	31,885
Dust From Material Movement	—	—	—	—	—	—	10.2	10.2	—	5.25	5.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	3.83	4.41	0.01	0.16	—	0.16	0.14	—	0.14	—	958	958	0.04	0.01	—	961
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.70	0.80	< 0.005	0.03	—	0.03	0.03	—	0.03	—	159	159	0.01	< 0.005	—	159
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.32	0.23	4.96	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,633	1,633	0.02	0.01	2.68	1,639
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.5	47.5	< 0.005	< 0.005	0.03	47.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.86	7.86	< 0.005	< 0.005	0.01	7.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2033) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	1.00	5.18	56.6	0.10	0.20	—	0.20	0.20	—	0.20	—	10,592	10,592	0.43	0.09	—	10,628
Dust From Material Movement	—	—	—	—	—	—	10.2	10.2	—	5.25	5.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.16	1.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	319	319	0.01	< 0.005	—	320
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.8	52.8	< 0.005	< 0.005	—	53.0
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.32	0.23	4.96	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,633	1,633	0.02	0.01	2.68	1,639
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.5	47.5	< 0.005	< 0.005	0.03	47.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.86	7.86	< 0.005	< 0.005	0.01	7.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2033) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	17.8	15.0	111	151	0.37	4.41	—	4.41	4.05	—	4.05	—	39,577	39,577	1.61	0.32	—	39,713

Dust From Material Movement	—	—	—	—	—	—	4.82	4.82	—	1.90	1.90	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	17.8	15.0	111	151	0.37	4.41	—	4.41	4.05	—	4.05	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	4.82	4.82	—	1.90	1.90	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.01	7.57	56.1	76.4	0.18	2.22	—	2.22	2.05	—	2.05	—	19,982	19,982	0.81	0.16	—	20,051
Dust From Material Movement	—	—	—	—	—	—	2.43	2.43	—	0.96	0.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.64	1.38	10.2	13.9	0.03	0.41	—	0.41	0.37	—	0.37	—	3,308	3,308	0.13	0.03	—	3,320
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.36	0.27	5.67	0.00	0.00	2.09	2.09	0.00	0.49	0.49	—	1,866	1,866	0.02	0.01	3.06	1,873
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	5.16	1.21	74.3	33.3	0.52	1.03	21.2	22.2	1.03	5.94	6.98	—	67,152	67,152	3.90	10.6	82.7	70,495
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.36	0.34	4.89	0.00	0.00	2.09	2.09	0.00	0.49	0.49	—	1,776	1,776	0.02	0.01	0.08	1,780
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	5.06	1.11	77.2	33.6	0.54	1.03	21.2	22.2	1.03	5.94	6.98	—	67,186	67,186	3.90	10.6	2.16	70,448
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.17	2.59	0.00	0.00	1.04	1.04	0.00	0.24	0.24	—	909	909	0.01	0.01	0.67	912
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	2.59	0.59	39.3	16.9	0.27	0.52	10.6	11.1	0.52	2.98	3.50	—	33,912	33,912	1.97	5.36	18.1	35,576
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.47	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	151	151	< 0.005	< 0.005	0.11	151
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.47	0.11	7.16	3.08	0.05	0.10	1.93	2.03	0.10	0.54	0.64	—	5,615	5,615	0.33	0.89	3.00	5,890

3.6. Grading (2033) - Mitigated

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

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

Off-Road Equipment	1.28	1.28	8.85	70.7	0.12	0.25	—	0.25	0.25	—	0.25	—	13,192	13,192	0.54	0.11	—	13,238
Dust From Material Movement	—	—	—	—	—	—	4.82	4.82	—	1.90	1.90	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.28	8.85	70.7	0.12	0.25	—	0.25	0.25	—	0.25	—	13,192	13,192	0.54	0.11	—	13,238
Dust From Material Movement	—	—	—	—	—	—	4.82	4.82	—	1.90	1.90	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.65	4.47	35.7	0.06	0.13	—	0.13	0.13	—	0.13	—	6,661	6,661	0.27	0.05	—	6,684
Dust From Material Movement	—	—	—	—	—	—	2.43	2.43	—	0.96	0.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	0.82	6.51	0.01	0.02	—	0.02	0.02	—	0.02	—	1,103	1,103	0.04	0.01	—	1,107
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.18	0.18	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.36	0.27	5.67	0.00	0.00	2.09	2.09	0.00	0.49	0.49	—	1,866	1,866	0.02	0.01	3.06	1,873
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	5.16	1.21	74.3	33.3	0.52	1.03	21.2	22.2	1.03	5.94	6.98	—	67,152	67,152	3.90	10.6	82.7	70,495
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.36	0.34	4.89	0.00	0.00	2.09	2.09	0.00	0.49	0.49	—	1,776	1,776	0.02	0.01	0.08	1,780
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	5.06	1.11	77.2	33.6	0.54	1.03	21.2	22.2	1.03	5.94	6.98	—	67,186	67,186	3.90	10.6	2.16	70,448
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.17	2.59	0.00	0.00	1.04	1.04	0.00	0.24	0.24	—	909	909	0.01	0.01	0.67	912
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	2.59	0.59	39.3	16.9	0.27	0.52	10.6	11.1	0.52	2.98	3.50	—	33,912	33,912	1.97	5.36	18.1	35,576
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.47	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	151	151	< 0.005	< 0.005	0.11	151
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.47	0.11	7.16	3.08	0.05	0.10	1.93	2.03	0.10	0.54	0.64	—	5,615	5,615	0.33	0.89	3.00	5,890

3.7. Grading (2034) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	17.4	14.6	107	150	0.37	4.07	—	4.07	3.75	—	3.75	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	4.82	4.82	—	1.90	1.90	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.06	0.89	6.46	9.12	0.02	0.25	—	0.25	0.23	—	0.23	—	2,401	2,401	0.10	0.02	—	2,409
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.18	1.67	< 0.005	0.05	—	0.05	0.04	—	0.04	—	398	398	0.02	< 0.005	—	399
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.35	0.27	4.65	0.00	0.00	2.09	2.09	0.00	0.49	0.49	—	1,756	1,756	0.02	0.01	0.07	1,760
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	5.06	1.11	74.4	32.6	0.54	1.03	21.2	22.2	1.03	5.94	6.98	—	65,425	65,425	3.87	10.6	1.91	68,686
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	108	108	< 0.005	< 0.005	0.07	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.31	0.07	4.55	1.97	0.03	0.06	1.27	1.34	0.06	0.36	0.42	—	3,968	3,968	0.23	0.64	1.92	4,167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	17.9	17.9	< 0.005	< 0.005	0.01	17.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.01	0.83	0.36	0.01	0.01	0.23	0.24	0.01	0.07	0.08	—	657	657	0.04	0.11	0.32	690

3.8. Grading (2034) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.28	8.85	70.7	0.12	0.25	—	0.25	0.25	—	0.25	—	13,192	13,192	0.54	0.11	—	13,238

Dust From Material Movement	—	—	—	—	—	—	4.82	4.82	—	1.90	1.90	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.54	4.29	0.01	0.02	—	0.02	0.02	—	0.02	—	800	800	0.03	0.01	—	803
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	133	133	0.01	< 0.005	—	133
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.35	0.27	4.65	0.00	0.00	2.09	2.09	0.00	0.49	0.49	—	1,756	1,756	0.02	0.01	0.07	1,760
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	5.06	1.11	74.4	32.6	0.54	1.03	21.2	22.2	1.03	5.94	6.98	—	65,425	65,425	3.87	10.6	1.91	68,686

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	108	108	< 0.005	< 0.005	0.07	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.31	0.07	4.55	1.97	0.03	0.06	1.27	1.34	0.06	0.36	0.42	—	3,968	3,968	0.23	0.64	1.92	4,167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	17.9	17.9	< 0.005	< 0.005	0.01	17.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.01	0.83	0.36	0.01	0.01	0.23	0.24	0.01	0.07	0.08	—	657	657	0.04	0.11	0.32	690

3.9. Building Construction (2034) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.19	5.18	45.1	76.6	0.14	1.15	—	1.15	1.06	—	1.06	—	14,381	14,381	0.58	0.12	—	14,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.39	9.14	0.02	0.14	—	0.14	0.13	—	0.13	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	0.11	0.98	1.67	< 0.005	0.03	—	0.03	0.02	—	0.02	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.8	13.5	10.4	179	0.00	0.00	80.3	80.3	0.00	18.8	18.8	—	67,470	67,470	0.68	0.41	2.64	67,610
Vendor	2.22	0.81	32.5	16.5	0.30	0.30	11.5	11.8	0.30	3.18	3.49	—	33,135	33,135	1.38	4.75	1.00	34,586
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.63	1.59	1.22	22.4	0.00	0.00	9.47	9.47	0.00	2.22	2.22	—	8,164	8,164	0.08	0.05	5.26	8,185
Vendor	0.27	0.10	3.87	1.95	0.04	0.04	1.36	1.40	0.04	0.38	0.41	—	3,954	3,954	0.17	0.57	1.97	4,129
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.29	0.22	4.09	0.00	0.00	1.73	1.73	0.00	0.40	0.40	—	1,352	1,352	0.01	0.01	0.87	1,355
Vendor	0.05	0.02	0.71	0.36	0.01	0.01	0.25	0.25	0.01	0.07	0.08	—	655	655	0.03	0.09	0.33	684
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	0.00	0.00

3.10. Building Construction (2034) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.00	1.72	13.6	38.3	0.06	0.31	—	0.31	0.29	—	0.29	—	6,039	6,039	0.24	0.05	—	6,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.21	1.63	4.57	0.01	0.04	—	0.04	0.04	—	0.04	—	721	721	0.03	0.01	—	723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.30	0.83	< 0.005	0.01	—	0.01	0.01	—	0.01	—	119	119	< 0.005	< 0.005	—	120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.8	13.5	10.4	179	0.00	0.00	80.3	80.3	0.00	18.8	18.8	—	67,470	67,470	0.68	0.41	2.64	67,610
Vendor	2.22	0.81	32.5	16.5	0.30	0.30	11.5	11.8	0.30	3.18	3.49	—	33,135	33,135	1.38	4.75	1.00	34,586
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.63	1.59	1.22	22.4	0.00	0.00	9.47	9.47	0.00	2.22	2.22	—	8,164	8,164	0.08	0.05	5.26	8,185
Vendor	0.27	0.10	3.87	1.95	0.04	0.04	1.36	1.40	0.04	0.38	0.41	—	3,954	3,954	0.17	0.57	1.97	4,129
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.29	0.22	4.09	0.00	0.00	1.73	1.73	0.00	0.40	0.40	—	1,352	1,352	0.01	0.01	0.87	1,355
Vendor	0.05	0.02	0.71	0.36	0.01	0.01	0.25	0.25	0.01	0.07	0.08	—	655	655	0.03	0.09	0.33	684
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	0.00	0.00

3.11. Building Construction (2035) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.08	5.08	44.0	76.1	0.14	1.08	—	1.08	0.99	—	0.99	—	14,381	14,381	0.58	0.12	—	14,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.08	5.08	44.0	76.1	0.14	1.08	—	1.08	0.99	—	0.99	—	14,381	14,381	0.58	0.12	—	14,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.63	31.4	54.4	0.10	0.77	—	0.77	0.71	—	0.71	—	10,272	10,272	0.42	0.08	—	10,307

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.66	5.74	9.92	0.02	0.14	—	0.14	0.13	—	0.13	—	1,701	1,701	0.07	0.01	—	1,707
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.6	13.3	9.96	200	0.00	0.00	80.3	80.3	0.00	18.8	18.8	—	70,149	70,149	0.54	0.41	87.8	70,371
Vendor	2.28	0.87	29.9	15.5	0.30	0.30	11.5	11.8	0.30	3.18	3.49	—	31,907	31,907	1.38	4.75	32.3	33,390
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.3	13.1	10.2	172	0.00	0.00	80.3	80.3	0.00	18.8	18.8	—	66,786	66,786	0.68	0.41	2.28	66,926
Vendor	2.22	0.81	31.4	15.9	0.30	0.30	11.5	11.8	0.30	3.18	3.49	—	31,934	31,934	1.38	4.75	0.84	33,385
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.53	9.34	7.31	128	0.00	0.00	56.7	56.7	0.00	13.3	13.3	—	48,351	48,351	0.48	0.29	27.1	48,477
Vendor	1.61	0.60	22.4	11.2	0.22	0.22	8.14	8.36	0.22	2.25	2.47	—	22,799	22,799	0.99	3.39	9.96	23,845
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.74	1.70	1.33	23.3	0.00	0.00	10.3	10.3	0.00	2.42	2.42	—	8,005	8,005	0.08	0.05	4.49	8,026
Vendor	0.29	0.11	4.09	2.04	0.04	0.04	1.49	1.53	0.04	0.41	0.45	—	3,775	3,775	0.16	0.56	1.65	3,948
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	0.00	0.00

3.12. Building Construction (2035) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.71	13.6	38.3	0.06	0.31	—	0.31	0.29	—	0.29	—	6,039	6,039	0.24	0.05	—	6,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.71	13.6	38.3	0.06	0.31	—	0.31	0.29	—	0.29	—	6,039	6,039	0.24	0.05	—	6,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	1.22	9.72	27.3	0.05	0.22	—	0.22	0.21	—	0.21	—	4,314	4,314	0.17	0.03	—	4,328
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.77	4.99	0.01	0.04	—	0.04	0.04	—	0.04	—	714	714	0.03	0.01	—	717
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.6	13.3	9.96	200	0.00	0.00	80.3	80.3	0.00	18.8	18.8	—	70,149	70,149	0.54	0.41	87.8	70,371
Vendor	2.28	0.87	29.9	15.5	0.30	0.30	11.5	11.8	0.30	3.18	3.49	—	31,907	31,907	1.38	4.75	32.3	33,390
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.3	13.1	10.2	172	0.00	0.00	80.3	80.3	0.00	18.8	18.8	—	66,786	66,786	0.68	0.41	2.28	66,926
Vendor	2.22	0.81	31.4	15.9	0.30	0.30	11.5	11.8	0.30	3.18	3.49	—	31,934	31,934	1.38	4.75	0.84	33,385
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.53	9.34	7.31	128	0.00	0.00	56.7	56.7	0.00	13.3	13.3	—	48,351	48,351	0.48	0.29	27.1	48,477
Vendor	1.61	0.60	22.4	11.2	0.22	0.22	8.14	8.36	0.22	2.25	2.47	—	22,799	22,799	0.99	3.39	9.96	23,845
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.74	1.70	1.33	23.3	0.00	0.00	10.3	10.3	0.00	2.42	2.42	—	8,005	8,005	0.08	0.05	4.49	8,026
Vendor	0.29	0.11	4.09	2.04	0.04	0.04	1.49	1.53	0.04	0.41	0.45	—	3,775	3,775	0.16	0.56	1.65	3,948
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	0.00	0.00

3.13. Building Construction (2036) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.96	4.99	42.7	75.6	0.14	1.01	—	1.01	0.93	—	0.93	—	14,381	14,381	0.58	0.12	—	14,430
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.06	0.89	7.61	13.5	0.03	0.18	—	0.18	0.17	—	0.17	—	2,561	2,561	0.10	0.02	—	2,570
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.39	2.46	< 0.005	0.03	—	0.03	0.03	—	0.03	—	424	424	0.02	< 0.005	—	425
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.2	12.9	10.2	166	0.00	0.00	80.3	80.3	0.00	18.8	18.8	—	66,100	66,100	0.54	0.41	1.96	66,237
Vendor	2.22	0.81	30.4	15.5	0.30	0.30	11.5	11.8	0.30	3.18	3.49	—	30,776	30,776	1.38	4.45	0.70	32,136
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.35	2.30	1.80	30.8	0.00	0.00	14.1	14.1	0.00	3.31	3.31	—	11,931	11,931	0.10	0.07	5.81	11,961
Vendor	0.40	0.15	5.40	2.73	0.05	0.05	2.03	2.08	0.05	0.56	0.62	—	5,478	5,478	0.25	0.79	2.08	5,722
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	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.42	0.33	5.62	0.00	0.00	2.58	2.58	0.00	0.60	0.60	—	1,975	1,975	0.02	0.01	0.96	1,980
Vendor	0.07	0.03	0.98	0.50	0.01	0.01	0.37	0.38	0.01	0.10	0.11	—	907	907	0.04	0.13	0.34	947
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	0.00	0.00

3.14. Building Construction (2036) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.71	13.6	38.2	0.06	0.30	—	0.30	0.28	—	0.28	—	6,039	6,039	0.24	0.05	—	6,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.30	2.42	6.81	0.01	0.05	—	0.05	0.05	—	0.05	—	1,075	1,075	0.04	0.01	—	1,079
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.44	1.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	179
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.2	12.9	10.2	166	0.00	0.00	80.3	80.3	0.00	18.8	18.8	—	66,100	66,100	0.54	0.41	1.96	66,237
Vendor	2.22	0.81	30.4	15.5	0.30	0.30	11.5	11.8	0.30	3.18	3.49	—	30,776	30,776	1.38	4.45	0.70	32,136
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.35	2.30	1.80	30.8	0.00	0.00	14.1	14.1	0.00	3.31	3.31	—	11,931	11,931	0.10	0.07	5.81	11,961
Vendor	0.40	0.15	5.40	2.73	0.05	0.05	2.03	2.08	0.05	0.56	0.62	—	5,478	5,478	0.25	0.79	2.08	5,722
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.42	0.33	5.62	0.00	0.00	2.58	2.58	0.00	0.60	0.60	—	1,975	1,975	0.02	0.01	0.96	1,980
Vendor	0.07	0.03	0.98	0.50	0.01	0.01	0.37	0.38	0.01	0.10	0.11	—	907	907	0.04	0.13	0.34	947
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	0.00	0.00

3.15. Paving (2034) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.11	3.45	35.1	58.9	0.08	1.06	—	1.06	0.98	—	0.98	—	9,064	9,064	0.37	0.07	—	9,095
Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.11	3.45	35.1	58.9	0.08	1.06	—	1.06	0.98	—	0.98	—	9,064	9,064	0.37	0.07	—	9,095
Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.19	1.84	18.8	31.5	0.04	0.57	—	0.57	0.52	—	0.52	—	4,842	4,842	0.20	0.04	—	4,859
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	3.43	5.75	0.01	0.10	—	0.10	0.10	—	0.10	—	802	802	0.03	0.01	—	804
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.26	0.20	4.08	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,384	1,384	0.01	0.01	1.99	1,388
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.27	0.26	0.20	3.49	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,317	1,317	0.01	0.01	0.05	1,320
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.11	1.96	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	713	713	0.01	< 0.005	0.46	715
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.36	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	118	118	< 0.005	< 0.005	0.08	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2034) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032

Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.17	2.07	11.3	0.01	0.03	—	0.03	0.03	—	0.03	—	1,614	1,614	0.07	0.01	—	1,620
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.38	2.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	267	267	0.01	< 0.005	—	268
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.26	0.20	4.08	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,384	1,384	0.01	0.01	1.99	1,388
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.26	0.20	3.49	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,317	1,317	0.01	0.01	0.05	1,320
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.11	1.96	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	713	713	0.01	< 0.005	0.46	715

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.36	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	118	118	< 0.005	< 0.005	0.08	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2036) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.51	6.58	0.01	0.03	—	0.03	0.03	—	0.03	—	801	801	0.03	0.01	—	804
Architectural Coatings	—	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.51	6.58	0.01	0.03	—	0.03	0.03	—	0.03	—	801	801	0.03	0.01	—	804
Architectural Coatings	—	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.35	1.97	< 0.005	0.01	—	0.01	0.01	—	0.01	—	239	239	0.01	< 0.005	—	240
Architectural Coatings	—	29.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.25	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.6	39.6	< 0.005	< 0.005	—	39.7
Architectural Coatings	—	5.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.64	2.59	1.99	38.3	0.00	0.00	16.1	16.1	0.00	3.77	3.77	—	13,886	13,886	0.11	0.08	15.1	13,928
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.64	2.59	2.05	33.2	0.00	0.00	16.1	16.1	0.00	3.77	3.77	—	13,220	13,220	0.11	0.08	0.39	13,247
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.77	0.60	10.3	0.00	0.00	4.74	4.74	0.00	1.11	1.11	—	4,002	4,002	0.03	0.02	1.95	4,012

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.11	1.88	0.00	0.00	0.86	0.86	0.00	0.20	0.20	—	663	663	0.01	< 0.005	0.32	664
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2036) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.29	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	267	267	0.01	< 0.005	—	268
Architectural Coatings	—	20.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.29	1.93	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	267	267	0.01	< 0.005	—	268
Architectural Coatings	—	20.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.39	0.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	79.7	79.7	< 0.005	< 0.005	—	80.0
Architectural Coatings	—	6.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.2	13.2	< 0.005	< 0.005	—	13.2
Architectural Coatings	—	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.64	2.59	1.99	38.3	0.00	0.00	16.1	16.1	0.00	3.77	3.77	—	13,886	13,886	0.11	0.08	15.1	13,928
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.64	2.59	2.05	33.2	0.00	0.00	16.1	16.1	0.00	3.77	3.77	—	13,220	13,220	0.11	0.08	0.39	13,247
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.77	0.60	10.3	0.00	0.00	4.74	4.74	0.00	1.11	1.11	—	4,002	4,002	0.03	0.02	1.95	4,012

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.11	1.88	0.00	0.00	0.86	0.86	0.00	0.20	0.20	—	663	663	0.01	< 0.005	0.32	664
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	17.5	16.1	9.70	132	0.38	0.17	16.2	16.3	0.15	2.86	3.01	—	38,458	38,458	1.51	1.41	44.1	38,961
Regional Shopping Center	2.82	2.67	1.17	13.8	0.03	0.02	1.35	1.37	0.01	0.24	0.25	—	3,325	3,325	0.19	0.16	3.69	3,380
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	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	20.4	18.7	10.9	146	0.41	0.18	17.5	17.7	0.17	3.10	3.27	—	41,783	41,783	1.71	1.57	47.8	42,341
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	17.5	16.0	10.5	123	0.36	0.17	16.2	16.3	0.15	2.86	3.01	—	36,975	36,975	1.57	1.47	1.14	37,455
Regional Shopping Center	2.83	2.67	1.27	13.5	0.03	0.02	1.35	1.37	0.01	0.24	0.25	—	3,201	3,201	0.20	0.17	0.10	3,256
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	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	20.3	18.7	11.8	136	0.39	0.18	17.5	17.7	0.17	3.10	3.27	—	40,177	40,177	1.77	1.64	1.24	40,711
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.17	2.90	1.94	22.9	0.07	0.03	2.95	2.98	0.03	0.52	0.55	—	6,188	6,188	0.26	0.24	3.15	6,270
Regional Shopping Center	0.51	0.48	0.22	2.39	0.01	< 0.005	0.23	0.23	< 0.005	0.04	0.04	—	498	498	0.03	0.03	0.24	507
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	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	3.67	3.37	2.16	25.3	0.07	0.03	3.18	3.21	0.03	0.56	0.59	—	6,685	6,685	0.29	0.27	3.39	6,777

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	12.3	11.2	6.79	92.4	0.26	0.12	11.3	11.4	0.11	2.00	2.11	—	26,921	26,921	1.06	0.99	30.9	27,273
Regional Shopping Center	2.76	2.61	1.14	13.5	0.03	0.02	1.32	1.34	0.01	0.23	0.25	—	3,249	3,249	0.19	0.15	3.61	3,303
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	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	15.0	13.8	7.93	106	0.30	0.13	12.6	12.8	0.12	2.23	2.36	—	30,169	30,169	1.25	1.14	34.5	30,575
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	12.3	11.2	7.38	86.0	0.25	0.12	11.3	11.4	0.11	2.00	2.11	—	25,883	25,883	1.10	1.03	0.80	26,218
Regional Shopping Center	2.76	2.61	1.24	13.2	0.03	0.02	1.32	1.34	0.01	0.23	0.25	—	3,129	3,129	0.20	0.16	0.09	3,182
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	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	15.0	13.8	8.62	99.2	0.28	0.13	12.6	12.8	0.12	2.23	2.36	—	29,011	29,011	1.29	1.19	0.89	29,400
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.22	2.03	1.36	16.1	0.05	0.02	2.06	2.08	0.02	0.37	0.38	—	4,331	4,331	0.18	0.17	2.21	4,389
Regional Shopping Center	0.49	0.47	0.22	2.33	0.01	< 0.005	0.22	0.23	< 0.005	0.04	0.04	—	486	486	0.03	0.03	0.24	495
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	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	2.71	2.49	1.57	18.4	0.05	0.02	2.29	2.31	0.02	0.40	0.43	—	4,818	4,818	0.21	0.20	2.44	4,884

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

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,979	3,979	0.50	0.06	—	4,009
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	246	246	0.03	< 0.005	—	248
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	2,711	2,711	0.34	0.04	—	2,732
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,935	6,935	0.88	0.11	—	6,989
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,979	3,979	0.50	0.06	—	4,009
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	246	246	0.03	< 0.005	—	248
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	2,711	2,711	0.34	0.04	—	2,732
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,935	6,935	0.88	0.11	—	6,989
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	659	659	0.08	0.01	—	664
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	40.7	40.7	0.01	< 0.005	—	41.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	449	449	0.06	0.01	—	452
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,148	1,148	0.15	0.02	—	1,157

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,723	3,723	0.47	0.06	—	3,752
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	220	220	0.03	< 0.005	—	222
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	2,732	2,732	0.35	0.04	—	2,753
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,675	6,675	0.84	0.10	—	6,727
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,693	3,693	0.47	0.06	—	3,722
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	220	220	0.03	< 0.005	—	221
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	2,711	2,711	0.34	0.04	—	2,732
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,624	6,624	0.84	0.10	—	6,675
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	615	615	0.08	0.01	—	620
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	36.4	36.4	< 0.005	< 0.005	—	36.7
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	451	451	0.06	0.01	—	455
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	1,102	1,102	0.14	0.02	—	1,111

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.49	1.25	21.3	9.06	0.14	1.72	—	1.72	1.72	—	1.72	—	27,035	27,035	2.39	0.05	—	27,110
Regional Shopping Center	0.02	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	269	269	0.02	< 0.005	—	269
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	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	2.52	1.26	21.5	9.25	0.14	1.74	—	1.74	1.74	—	1.74	—	27,304	27,304	2.42	0.05	—	27,379
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.49	1.25	21.3	9.06	0.14	1.72	—	1.72	1.72	—	1.72	—	27,035	27,035	2.39	0.05	—	27,110
Regional Shopping Center	0.02	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	269	269	0.02	< 0.005	—	269

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	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	2.52	1.26	21.5	9.25	0.14	1.74	—	1.74	1.74	—	1.74	—	27,304	27,304	2.42	0.05	—	27,379
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.45	0.23	3.89	1.65	0.02	0.31	—	0.31	0.31	—	0.31	—	4,476	4,476	0.40	0.01	—	4,488
Regional Shopping Center	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.5	44.5	< 0.005	< 0.005	—	44.6
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	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	0.46	0.23	3.93	1.69	0.03	0.32	—	0.32	0.32	—	0.32	—	4,520	4,520	0.40	0.01	—	4,533

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

Apartments	2.21	1.10	18.9	8.03	0.12	1.53	—	1.53	1.53	—	1.53	—	23,957	23,957	2.12	0.05	—	24,023
Regional Shopping Center	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	267
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	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	2.23	1.12	19.1	8.22	0.12	1.54	—	1.54	1.54	—	1.54	—	24,223	24,223	2.14	0.05	—	24,290
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.21	1.10	18.9	8.03	0.12	1.53	—	1.53	1.53	—	1.53	—	23,957	23,957	2.12	0.05	—	24,023
Regional Shopping Center	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	267
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	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	2.23	1.12	19.1	8.22	0.12	1.54	—	1.54	1.54	—	1.54	—	24,223	24,223	2.14	0.05	—	24,290
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	0.40	0.20	3.44	1.47	0.02	0.28	—	0.28	0.28	—	0.28	—	3,966	3,966	0.35	0.01	—	3,977
Regional Shopping Center	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.1	44.1	< 0.005	< 0.005	—	44.2
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	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	0.41	0.20	3.49	1.50	0.02	0.28	—	0.28	0.28	—	0.28	—	4,010	4,010	0.35	0.01	—	4,022

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	36.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	16.1	15.1	1.18	133	0.01	0.09	—	0.09	0.12	—	0.12	—	421	421	0.02	< 0.005	—	422
Total	16.1	51.6	1.18	133	0.01	0.09	—	0.09	0.12	—	0.12	0.00	421	421	0.02	< 0.005	—	422

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	36.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	36.5	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	6.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.01	1.88	0.15	16.6	< 0.005	0.01	—	0.01	0.02	—	0.02	—	47.7	47.7	< 0.005	< 0.005	—	47.9
Total	2.01	8.55	0.15	16.6	< 0.005	0.01	—	0.01	0.02	—	0.02	0.00	47.7	47.7	< 0.005	< 0.005	—	47.9

4.3.1. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	36.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	36.5	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	36.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	36.5	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	6.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	6.67	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	109	277	386	11.2	0.27	—	748
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	4.97	12.6	17.6	0.51	0.01	—	34.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	109	277	386	11.2	0.27	—	748
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	4.97	12.6	17.6	0.51	0.01	—	34.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	18.1	45.9	64.0	1.86	0.04	—	124
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.82	2.09	2.91	0.08	< 0.005	—	5.63
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.9	48.0	66.9	1.94	0.05	—	129

4.4.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	109	277	386	11.2	0.27	—	748
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	4.97	12.6	17.6	0.51	0.01	—	34.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	109	277	386	11.2	0.27	—	748

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	4.97	12.6	17.6	0.51	0.01	—	34.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	114	290	404	11.7	0.28	—	782
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	18.1	45.9	64.0	1.86	0.04	—	124
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.82	2.09	2.91	0.08	< 0.005	—	5.63
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.9	48.0	66.9	1.94	0.05	—	129

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	605	0.00	605	60.5	0.00	—	2,118
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	—	0.44
Total	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	605	0.00	605	60.5	0.00	—	2,118
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	—	0.44
Total	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	3.28	0.00	3.28	0.33	0.00	—	11.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	—	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.3	0.00	—	362

4.5.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	605	0.00	605	60.5	0.00	—	2,118
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	—	0.44
Total	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	605	0.00	605	60.5	0.00	—	2,118
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	—	0.44
Total	—	—	—	—	—	—	—	—	—	—	—	625	0.00	625	62.5	0.00	—	2,188
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	3.28	0.00	3.28	0.33	0.00	—	11.5

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	—	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.3	0.00	—	362

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.98	1.98
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.01	2.01

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.98	1.98
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.01	2.01

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

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

4.7.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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)

Vegetatio	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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	1/1/2033	3/31/2033	5.00	64.0	—
Site Preparation	Site Preparation	4/1/2033	4/17/2033	5.00	11.0	—
Grading	Grading	4/18/2033	1/31/2034	5.00	207	—
Building Construction	Building Construction	11/1/2034	3/31/2036	5.00	369	—
Paving	Paving	2/1/2034	10/31/2034	5.00	195	—
Architectural Coating	Architectural Coating	1/1/2036	5/31/2036	5.00	109	—

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
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
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
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40

Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

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

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	270	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	270	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	270	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	270	20.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	293	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	293	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	293	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	293	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,537	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	337	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Building Construction	Worker	1,537	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	337	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Building Construction	Worker	1,537	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	337	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Building Construction	Worker	1,537	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	337	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2

Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	307	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Architectural Coating	Worker	307	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Architectural Coating	Worker	307	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT
Architectural Coating	Worker	307	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	270	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	270	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	270	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	270	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2

Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	293	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	293	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	293	20.0	HHDT

Grading	Onsite truck	—	—	HHDT
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	293	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,537	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	337	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Building Construction	Worker	1,537	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	337	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Building Construction	Worker	1,537	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	337	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Building Construction	Worker	1,537	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	337	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	307	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Architectural Coating	Worker	307	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Architectural Coating	Worker	307	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Architectural Coating	Worker	307	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

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

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,383,613	1,127,871	62,105	18,567	14,662

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	69,108	—
Site Preparation	—	—	33.0	0.00	—
Grading	—	484,869	1,242	0.00	—
Paving	0.00	0.00	0.00	0.00	8.34

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
Apartments Mid Rise	—	0%
Apartments Mid Rise	—	0%
Regional Shopping Center	0.00	0%
Enclosed Parking with Elevator	4.90	100%
Other Asphalt Surfaces	3.44	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2033	0.00	261	0.03	< 0.005
2034	0.00	261	0.03	< 0.005
2034	0.00	261	0.03	< 0.005
2034	0.00	261	0.03	< 0.005
2035	0.00	261	0.03	< 0.005
2036	0.00	261	0.03	< 0.005
2035	0.00	261	0.03	< 0.005
2036	0.00	261	0.03	< 0.005
2035	0.00	261	0.03	< 0.005
2036	0.00	261	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	6,896	6,896	6,896	2,517,135	58,437	58,437	58,437	21,329,448
Regional Shopping Center	1,295	1,295	1,295	472,675	4,378	4,892	4,892	1,651,442
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	4,827	4,827	4,827	1,761,994	40,906	40,906	40,906	14,930,614
Regional Shopping Center	1,265	1,265	1,265	461,903	4,278	4,780	4,780	1,613,807
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	152
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	152
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

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

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)
Apartments Mid Rise	5,568,402	261	0.0330	0.0040	16,871,294
Regional Shopping Center	343,748	261	0.0330	0.0040	209,543
Enclosed Parking with Elevator	3,794,792	261	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	261	0.0330	0.0040	0.00
City Park	0.00	261	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	5,169,132	261	0.0330	0.0040	14,950,265
Regional Shopping Center	307,282	261	0.0330	0.0040	207,760
Enclosed Parking with Elevator	3,794,792	261	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	261	0.0330	0.0040	0.00
City Park	0.00	261	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	57,001,462	0.00
Regional Shopping Center	2,592,538	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	57,001,462	0.00
Regional Shopping Center	2,592,538	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	1123.35	0.00
Regional Shopping Center	36.75	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.23	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	1123.35	0.00
Regional Shopping Center	36.75	0.00
Enclosed Parking with Elevator	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.23	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.23	annual days of extreme heat
Extreme Precipitation	3.60	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	53.7
AQ-PM	59.2
AQ-DPM	30.6
Drinking Water	44.6
Lead Risk Housing	34.5
Pesticides	0.00
Toxic Releases	86.8
Traffic	55.6
Effect Indicators	—

CleanUp Sites	0.00
Groundwater	47.4
Haz Waste Facilities/Generators	74.7
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	42.3
Cardio-vascular	34.4
Low Birth Weights	36.7
Socioeconomic Factor Indicators	—
Education	43.4
Housing	53.6
Linguistic	37.7
Poverty	50.2
Unemployment	3.58

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	59.19414859
Employed	97.42076222
Median HI	59.19414859
Education	—
Bachelor's or higher	73.0784037
High school enrollment	100
Preschool enrollment	9.713845759

Transportation	—
Auto Access	57.21801617
Active commuting	16.10419607
Social	—
2-parent households	16.88694983
Voting	23.36712434
Neighborhood	—
Alcohol availability	51.4307712
Park access	41.76825356
Retail density	84.88387014
Supermarket access	69.88322854
Tree canopy	67.77877582
Housing	—
Homeownership	21.2498396
Housing habitability	46.43911202
Low-inc homeowner severe housing cost burden	27.30655717
Low-inc renter severe housing cost burden	80.90594123
Uncrowded housing	40.60053895
Health Outcomes	—
Insured adults	46.18247145
Arthritis	92.6
Asthma ER Admissions	65.9
High Blood Pressure	92.0
Cancer (excluding skin)	60.5
Asthma	80.2
Coronary Heart Disease	91.8
Chronic Obstructive Pulmonary Disease	89.8

Diagnosed Diabetes	90.6
Life Expectancy at Birth	65.4
Cognitively Disabled	35.0
Physically Disabled	85.5
Heart Attack ER Admissions	71.9
Mental Health Not Good	73.6
Chronic Kidney Disease	93.4
Obesity	86.0
Pedestrian Injuries	44.9
Physical Health Not Good	85.2
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	10.6
Current Smoker	71.8
No Leisure Time for Physical Activity	71.9
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	71.1
Elderly	60.7
English Speaking	61.5
Foreign-born	71.2
Outdoor Workers	41.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.4
Traffic Density	53.3
Traffic Access	57.9

Other Indices	—
Hardship	23.6
Other Decision Support	—
2016 Voting	60.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	34.0
Healthy Places Index Score for Project Location (b)	57.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Adjusted per project specific details. Landscape area included in City Park, rec area included in overall square footage.
Construction: Construction Phases	anticipated construction schedule

Construction: Architectural Coatings	added coatings phase
Construction: Paving	other asphalt surfaces increased to capture all potential paved areas
Operations: Vehicle Data	Trip rates per traffic study
Operations: Hearths	No wood burning per SCAQMD Rule 445

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Related Bristol Off-Site Improvements (Unmitigated)

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.92	10.16	7.87	3.36	0.36	3.00	0.94	0.31	0.62	0.02	2,257.17	0.59	0.04	2,285.18
Grading/Excavation	3.17	35.60	29.09	4.27	1.27	3.00	1.74	1.12	0.62	0.08	7,570.05	2.19	0.10	7,653.88
Drainage/Utilities/Sub-Grade	2.08	24.87	19.98	3.83	0.83	3.00	1.35	0.72	0.62	0.06	5,446.29	0.84	0.19	5,523.22
Paving	1.31	18.64	18.81	0.79	0.79	0.00	0.59	0.59	0.00	0.06	6,400.77	0.76	0.60	6,599.69
Maximum (pounds/day)	3.17	35.60	29.09	4.27	1.27	3.00	1.74	1.12	0.62	0.08	7,570.05	2.19	0.60	7,653.88
Total (tons/construction project)	0.31	3.60	3.00	0.47	0.13	0.34	0.18	0.11	0.07	0.01	821.86	0.19	0.03	834.20

Notes:

Project Start Year ->	2026
Project Length (months) ->	12
Total Project Area (acres) ->	19
Maximum Area Disturbed/Day (acres) ->	0
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	320	40
Grading/Excavation	0	0	0	0	920	40
Drainage/Utilities/Sub-Grade	100	0	210	0	680	40
Paving	0	500	0	960	520	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Related Bristol Off-Site Improvements (Unmitigated)

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.01	0.13	0.10	0.04	0.00	0.04	0.01	0.00	0.01	0.00	29.79	0.01	0.00	27.36
Grading/Excavation	0.19	2.11	1.73	0.25	0.08	0.18	0.10	0.07	0.04	0.00	449.66	0.13	0.01	412.45
Drainage/Utilities/Sub-Grade	0.08	0.98	0.79	0.15	0.03	0.12	0.05	0.03	0.02	0.00	215.67	0.03	0.01	198.42
Paving	0.03	0.37	0.37	0.02	0.02	0.00	0.01	0.01	0.00	0.00	126.74	0.02	0.01	118.55
Maximum (tons/phase)	0.19	2.11	1.73	0.25	0.08	0.18	0.10	0.07	0.04	0.00	449.66	0.13	0.01	412.45
Total (tons/construction project)	0.31	3.60	3.00	0.47	0.13	0.34	0.18	0.11	0.07	0.01	821.86	0.19	0.03	756.78

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Road Construction Emissions Model **Version 9.0.0**

Data Entry Worksheet

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Input Type

Project Name	Related Bristol Off-Site Improvements (Unmitigated)	
Construction Start Year	2026	Enter a Year between 2014 and 2040 (inclusive)
Project Type	2	1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction
Project Construction Time	12.00	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the Ione formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)
Project Length	1.50	miles
Total Project Area	19.00	acres
Maximum Area Disturbed/Day	0.30	acres
Water Trucks Used?	1	1. Yes 2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd^3) (assume 20 if unknown)	Import Volume (yd^3/day)	Export Volume (yd^3/day)
Soil	Grubbing/Land Clearing	16.00	0.00	0.00
	Grading/Excavation	16.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	16.00	0.00	100.00
	Paving	16.00	0.00	0.00
Asphalt	Grubbing/Land Clearing	16.00	0.00	0.00
	Grading/Excavation	16.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	16.00	0.00	0.00
	Paving	16.00	500.00	0.00

Mitigation Options

On-road Fleet Emissions Mitigation	No Mitigation	Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation). Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard
Off-road Equipment Emissions Mitigation	No Mitigation	

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		1.20		1/1/2026
Grading/Excavation		5.40		2/7/2026
Drainage/Utilities/Sub-Grade		3.60		7/22/2026
Paving		1.80		11/9/2026
Totals (Months)		12		

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions User Input	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		7	210.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,660.70	0.00	0.26	1,738.54
Grading/Excavation (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,660.70	0.00	0.26	1,738.54
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,660.70	0.00	0.26	1,738.54
Paving (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,659.48	0.00	0.26	1,737.26
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.02	0.20	1.66	0.05	0.02	0.01	768.86	0.00	0.12	804.89
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.01	0.07	0.00	0.00	0.00	30.45	0.00	0.00	31.87
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.01	0.07	0.00	0.00	0.00	30.45	0.00	0.00	31.87

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions User Input	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		32	960.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,660.70	0.00	0.26	1,738.54
Grading/Excavation (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,660.70	0.00	0.26	1,738.54
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,660.70	0.00	0.26	1,738.54
Paving (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,659.48	0.00	0.26	1,737.26
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.08	0.91	7.57	0.24	0.11	0.03	3,512.19	0.00	0.55	3,676.80
Tons per const. Period - Paving	0.00	0.02	0.15	0.00	0.00	0.00	69.54	0.00	0.01	72.80
Total tons per construction project	0.00	0.02	0.15	0.00	0.00	0.00	69.54	0.00	0.01	72.80

Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values		
User Input				
Miles/ one-way trip		20		
One-way trips/day		2	Calculated Daily Trips	Calculated Daily VMT
No. of employees: Grubbing/Land Clearing		8	16	320.00
No. of employees: Grading/Excavation		23	46	920.00
No. of employees: Drainage/Utilities/Sub-Grade		17	34	680.00
No. of employees: Paving		13	26	520.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.01	0.72	0.05	0.05	0.02	0.00	285.85	0.00	0.01	287.41
Grading/Excavation (grams/mile)	0.01	0.72	0.05	0.05	0.02	0.00	285.85	0.00	0.01	287.41
Draining/Utilities/Sub-Grade (grams/mile)	0.01	0.72	0.05	0.05	0.02	0.00	285.85	0.00	0.01	287.41
Paving (grams/mile)	0.01	0.72	0.05	0.05	0.02	0.00	285.39	0.00	0.00	286.94
Grubbing/Land Clearing (grams/trip)	0.87	2.47	0.23	0.00	0.00	0.00	61.59	0.06	0.03	71.10
Grading/Excavation (grams/trip)	0.87	2.47	0.23	0.00	0.00	0.00	61.59	0.06	0.03	71.10
Draining/Utilities/Sub-Grade (grams/trip)	0.87	2.47	0.23	0.00	0.00	0.00	61.59	0.06	0.03	71.10
Paving (grams/trip)	0.87	2.47	0.23	0.00	0.00	0.00	61.49	0.06	0.03	70.98
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.04	0.60	0.04	0.03	0.01	0.00	203.83	0.00	0.00	205.27
Tons per const. Period - Grubbing/Land Clearing	0.00	0.01	0.00	0.00	0.00	0.00	2.69	0.00	0.00	2.71
Pounds per day - Grading/Excavation	0.11	1.72	0.12	0.09	0.04	0.01	586.02	0.01	0.01	590.14
Tons per const. Period - Grading/Excavation	0.01	0.10	0.01	0.01	0.00	0.00	34.81	0.00	0.00	35.05
Pounds per day - Drainage/Utilities/Sub-Grade	0.08	1.27	0.09	0.07	0.03	0.00	433.14	0.01	0.01	436.19
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.05	0.00	0.00	0.00	0.00	17.15	0.00	0.00	17.27
Pounds per day - Paving	0.06	0.97	0.07	0.05	0.02	0.00	330.69	0.01	0.01	333.02
Tons per const. Period - Paving	0.00	0.02	0.00	0.00	0.00	0.00	6.55	0.00	0.00	6.59
Total tons per construction project	0.01	0.18	0.01	0.01	0.00	0.00	61.20	0.00	0.00	61.63

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

Water Truck Emissions	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Round Trips/Vehicle/Day	Default Values Round Trips/Vehicle/Day	Calculated Trips/day	User Override of Miles/Round Trip	Default Values Miles/Round Trip	Calculated Daily VMT
User Input								
Grubbing/Land Clearing - Exhaust		1		5	5		8.00	40.00
Grading/Excavation - Exhaust		1		5	5		8.00	40.00
Drainage/Utilities/Subgrade		1		5	5		8.00	40.00
Paving		1		5	5		8.00	40.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,660.70	0.00	0.26	1,738.54
Grading/Excavation (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,660.70	0.00	0.26	1,738.54
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,660.70	0.00	0.26	1,738.54
Paving (grams/mile)	0.04	0.43	3.43	0.11	0.05	0.02	1,659.48	0.00	0.26	1,737.26
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.04	0.35	0.01	0.00	0.00	146.45	0.00	0.02	153.31
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	1.93	0.00	0.00	2.02
Pounds per day - Grading/Excavation	0.00	0.04	0.35	0.01	0.00	0.00	146.45	0.00	0.02	153.31
Tons per const. Period - Grading/Excavation	0.00	0.00	0.02	0.00	0.00	0.00	8.70	0.00	0.00	9.11
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.04	0.35	0.01	0.00	0.00	146.45	0.00	0.02	153.31
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.01	0.00	0.00	0.00	5.80	0.00	0.00	6.07
Pounds per day - Paving	0.00	0.04	0.35	0.01	0.00	0.00	146.34	0.00	0.02	153.20
Tons per const. Period - Paving	0.00	0.00	0.01	0.00	0.00	0.00	2.90	0.00	0.00	3.03
Total tons per construction project	0.00	0.00	0.05	0.00	0.00	0.00	19.33	0.00	0.00	20.24

Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing		0.30	3.00	0.04	0.62	0.01
Fugitive Dust - Grading/Excavation		0.30	3.00	0.18	0.62	0.04
Fugitive Dust - Drainage/Utilities/Subgrade		0.30	3.00	0.12	0.62	0.02

Off-Road Equipment Emissions

Grubbing/Land Clearing Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Crawler Tractors	0.37	2.10	3.96	0.15	0.14	0.01	758.27	0.25	0.01	766.45
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Excavators	0.33	6.52	2.44	0.12	0.11	0.01	1,000.68	0.32	0.01	1,011.46
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Model Default Tier	Signal Boards	0.17	0.90	1.08	0.04	0.04	0.00	147.94	0.02	0.00	148.69
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing	pounds per day	0.88	9.53	7.48	0.32	0.29	0.02	1,906.89	0.58	0.02	1,926.60
Grubbing/Land Clearing	tons per phase	0.01	0.13	0.10	0.00	0.00	0.00	25.17	0.01	0.00	25.43

Grading/Excavation Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Crawler Tractors	0.37	2.10	3.96	0.15	0.14	0.01	758.27	0.25	0.01	766.45
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Model Default Tier	Excavators	0.50	9.78	3.66	0.18	0.17	0.02	1,501.02	0.49	0.01	1,517.20
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Graders	0.31	1.59	3.46	0.11	0.10	0.01	640.24	0.21	0.01	647.14
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Rollers	0.27	3.69	2.89	0.15	0.13	0.01	508.12	0.16	0.00	513.60
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Rubber Tired Loaders	0.23	1.47	1.86	0.06	0.06	0.01	605.62	0.20	0.01	612.16
	2		Model Default Tier	Scrapers	0.67	5.38	6.37	0.25	0.23	0.02	1,468.15	0.47	0.01	1,483.97
	3		Model Default Tier	Signal Boards	0.17	0.90	1.08	0.04	0.04	0.00	147.94	0.02	0.00	148.69
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4		Model Default Tier	Tractors/Loaders/Backhoes	0.53	8.92	5.34	0.22	0.20	0.01	1,208.22	0.39	0.01	1,221.22
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment Number of Vehicles	If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grading/Excavation	pounds per day	3.06	33.84	28.61	1.16	1.07	0.07	6,837.58	2.18	0.06	6,910.43
Grading/Excavation	tons per phase	0.18	2.01	1.70	0.07	0.06	0.00	406.15	0.13	0.00	410.48

Drainage/Utilities/Subgrade Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Air Compressors	0.23	2.41	1.53	0.07	0.07	0.00	375.26	0.02	0.00	376.62
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Generator Sets	0.27	3.66	2.40	0.10	0.10	0.01	623.04	0.02	0.00	625.01
	1		Model Default Tier	Graders	0.16	0.80	1.73	0.06	0.05	0.00	320.12	0.10	0.00	323.57
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Plate Compactors	0.04	0.21	0.25	0.01	0.01	0.00	34.48	0.00	0.00	34.65
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Pumps	0.29	3.72	2.43	0.10	0.10	0.01	623.04	0.03	0.00	625.06
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Rough Terrain Forklifts	0.10	2.29	1.28	0.04	0.03	0.00	333.72	0.11	0.00	337.31
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Scrapers	0.34	2.69	3.19	0.13	0.12	0.01	734.07	0.24	0.01	741.99
	3		Model Default Tier	Signal Boards	0.17	0.90	1.08	0.04	0.04	0.00	147.94	0.02	0.00	148.69
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Model Default Tier	Tractors/Loaders/Backhoes	0.40	6.69	4.01	0.16	0.15	0.01	906.17	0.29	0.01	915.91
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Drainage/Utilities/Sub-Grade	pounds per day	1.98	23.36	17.88	0.70	0.67	0.04	4,097.83	0.83	0.03	4,128.82
Drainage/Utilities/Sub-Grade	tons per phase	0.08	0.93	0.71	0.03	0.03	0.00	162.27	0.03	0.00	163.50

Paving	Default Number of Vehicles	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Override of Default Number of Vehicles	*Program-estimate*				pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Pavers	0.17	2.90	1.58	0.07	0.07	0.00	454.99	0.15	0.00	459.90
	1		Model Default Tier	Paving Equipment	0.15	2.55	1.26	0.06	0.06	0.00	394.32	0.13	0.00	398.57
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Rollers	0.27	3.69	2.89	0.15	0.13	0.01	508.12	0.16	0.00	513.60
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Model Default Tier	Signal Boards	0.17	0.90	1.08	0.04	0.04	0.00	147.94	0.02	0.00	148.69
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Model Default Tier	Tractors/Loaders/Backhoes	0.40	6.69	4.01	0.16	0.15	0.01	906.17	0.29	0.01	915.91
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving		pounds per day		1.16	16.73	10.82	0.49	0.45	0.03	2,411.54	0.75	0.02	2,436.68
Paving		tons per phase		0.02	0.33	0.21	0.01	0.01	0.00	47.75	0.01	0.00	48.25
Total Emissions all Phases (tons per construction period) =>				0.29	3.39	2.72	0.11	0.10	0.01	641.35	0.18	0.01	647.66

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187	4.00	8
Off-Highway Tractors		124		8
Off-Highway Trucks		402		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		247		8
Rubber Tired Loaders		203		8
Scrapers		367	4.00	8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Related Bristol Off-Site Improvements (Mitigated)				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust					
Project Phases (Pounds)	**ROG (lbs/day)**	**CO (lbs/day)**	**NOx (lbs/day)**	**PM10 (lbs/day)**	**PM10 (lbs/day)**	**PM10 (lbs/day)**	**PM2.5 (lbs/day)**	**PM2.5 (lbs/day)**	**PM2.5 (lbs/day)**	**SOx (lbs/day)**	**CO2 (lbs/day)**	**CH4 (lbs/day)**	**N2O (lbs/day)**	**CO2e (lbs/day)**
Grubbing/Land Clearing	0.68	14.21	2.87	3.18	0.18	3.00	0.77	0.14	0.62	0.02	2,256.44	0.59	0.04	2,284.42
Grading/Excavation	2.31	47.53	6.07	3.39	0.39	3.00	0.93	0.31	0.62	0.08	7,569.33	2.19	0.10	7,653.12
Drainage/Utilities/Sub-Grade	1.35	29.41	5.93	3.34	0.34	3.00	0.87	0.25	0.62	0.06	5,441.76	0.84	0.19	5,518.47
Paving	0.92	21.10	10.08	0.45	0.45	0.00	0.27	0.27	0.00	0.06	6,382.76	0.76	0.60	6,580.82
Maximum (pounds/day)	2.31	47.53	10.08	3.39	0.45	3.00	0.93	0.31	0.62	0.08	7,569.33	2.19	0.60	7,653.12
Total (tons/construction project)	0.22	4.59	0.83	0.38	0.05	0.34	0.11	0.04	0.07	0.01	821.28	0.19	0.03	833.58

Notes:

Project Start Year ->	2026
Project Length (months) ->	12
Total Project Area (acres) ->	19
Maximum Area Disturbed/Day (acres) ->	0
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	320	40
Grading/Excavation	0	0	0	0	920	40
Drainage/Utilities/Sub-Grade	100	0	210	0	680	40
Paving	0	500	0	960	520	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Related Bristol Off-Site Improvements (Mitigated)				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust					
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	**ROG (tons/phase)**	**CO (tons/phase)**	**NOx (tons/phase)**	**PM10 (tons/phase)**	**PM10 (tons/phase)**	**PM10 (tons/phase)**	**PM2.5 (tons/phase)**	**PM2.5 (tons/phase)**	**PM2.5 (tons/phase)**	**SOx (tons/phase)**	**CO2 (tons/phase)**	**CH4 (tons/phase)**	**N2O (tons/phase)**	**CO2e (MT/phase)**
Grubbing/Land Clearing	0.01	0.19	0.04	0.04	0.00	0.04	0.01	0.00	0.01	0.00	29.79	0.01	0.00	27.36
Grading/Excavation	0.14	2.82	0.36	0.20	0.02	0.18	0.06	0.02	0.04	0.00	449.62	0.13	0.01	412.41
Drainage/Utilities/Sub-Grade	0.05	1.16	0.23	0.13	0.01	0.12	0.03	0.01	0.02	0.00	215.49	0.03	0.01	198.25
Paving	0.02	0.42	0.20	0.01	0.01	0.00	0.01	0.01	0.00	0.00	126.38	0.01	0.01	118.21
Maximum (tons/phase)	0.14	2.82	0.36	0.20	0.02	0.18	0.06	0.02	0.04	0.00	449.62	0.13	0.01	412.41
Total (tons/construction project)	0.22	4.59	0.83	0.38	0.05	0.34	0.11	0.04	0.07	0.01	821.28	0.19	0.03	756.22

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Road Construction Emissions Model **Version 9.0.0**

Data Entry Worksheet

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Input Type

Project Name	Related Bristol Off-Site Improvements (Mitigated)	
Construction Start Year	2026	Enter a Year between 2014 and 2040 (inclusive)
Project Type	2	1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction
Project Construction Time	12.00	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the Ione formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)
Project Length	1.50	miles
Total Project Area	19.00	acres
Maximum Area Disturbed/Day	0.30	acres
Water Trucks Used?	1	1. Yes 2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd^3) (assume 20 if unknown)	Import Volume (yd^3/day)	Export Volume (yd^3/day)
Soil	Grubbing/Land Clearing	16.00	0.00	0.00
	Grading/Excavation	16.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	16.00	0.00	100.00
	Paving	16.00	0.00	0.00
Asphalt	Grubbing/Land Clearing	16.00	0.00	0.00
	Grading/Excavation	16.00	0.00	0.00
	Drainage/Utilities/Sub-Grade	16.00	0.00	0.00
	Paving	16.00	500.00	0.00

Mitigation Options

On-road Fleet Emissions Mitigation	2010 and Newer On-road Vehicles Fleet	Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation). Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard
Off-road Equipment Emissions Mitigation	Tier 4 Equipment	
Will all off-road equipment be tier 4?	All Tier 4 Equipment	

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing		1.20		1/1/2026
Grading/Excavation		5.40		2/7/2026
Drainage/Utilities/Sub-Grade		3.60		7/22/2026
Paving		1.80		11/9/2026
Totals (Months)		12		

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions User Input	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		7	210.00
Miles/round trip: Paving		30.00		0	0.00

2010+ Model Year Mitigation Option Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,652.48	0.00	0.26	1,729.92
Grading/Excavation (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,652.48	0.00	0.26	1,729.92
Draining/Utilities/Sub-Grade (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,652.48	0.00	0.26	1,729.92
Paving (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,651.31	0.00	0.26	1,728.69
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.01	0.19	1.50	0.05	0.02	0.01	765.05	0.00	0.12	800.90
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.01	0.06	0.00	0.00	0.00	30.30	0.00	0.00	31.72
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.01	0.06	0.00	0.00	0.00	30.30	0.00	0.00	31.72

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions User Input	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		32	960.00

2010+ Model Year Mitigation Option Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,652.48	0.00	0.26	1,729.92
Grading/Excavation (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,652.48	0.00	0.26	1,729.92
Draining/Utilities/Sub-Grade (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,652.48	0.00	0.26	1,729.92
Paving (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,651.31	0.00	0.26	1,728.69
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.06	0.88	6.87	0.24	0.10	0.03	3,494.90	0.00	0.55	3,658.68
Tons per const. Period - Paving	0.00	0.02	0.14	0.00	0.00	0.00	69.20	0.00	0.01	72.44
Total tons per construction project	0.00	0.02	0.14	0.00	0.00	0.00	69.20	0.00	0.01	72.44

Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values		
User Input				
Miles/ one-way trip		20		
One-way trips/day		2	Calculated Daily Trips	Calculated Daily VMT
No. of employees: Grubbing/Land Clearing		8	16	320.00
No. of employees: Grading/Excavation		23	46	920.00
No. of employees: Drainage/Utilities/Sub-Grade		17	34	680.00
No. of employees: Paving		13	26	520.00

Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.01	0.72	0.05	0.05	0.02	0.00	285.85	0.00	0.01	287.41
Grading/Excavation (grams/mile)	0.01	0.72	0.05	0.05	0.02	0.00	285.85	0.00	0.01	287.41
Draining/Utilities/Sub-Grade (grams/mile)	0.01	0.72	0.05	0.05	0.02	0.00	285.85	0.00	0.01	287.41
Paving (grams/mile)	0.01	0.72	0.05	0.05	0.02	0.00	285.39	0.00	0.00	286.94
Grubbing/Land Clearing (grams/trip)	0.87	2.47	0.23	0.00	0.00	0.00	61.59	0.06	0.03	71.10
Grading/Excavation (grams/trip)	0.87	2.47	0.23	0.00	0.00	0.00	61.59	0.06	0.03	71.10
Draining/Utilities/Sub-Grade (grams/trip)	0.87	2.47	0.23	0.00	0.00	0.00	61.59	0.06	0.03	71.10
Paving (grams/trip)	0.87	2.47	0.23	0.00	0.00	0.00	61.49	0.06	0.03	70.98
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.04	0.60	0.04	0.03	0.01	0.00	203.83	0.00	0.00	205.27
Tons per const. Period - Grubbing/Land Clearing	0.00	0.01	0.00	0.00	0.00	0.00	2.69	0.00	0.00	2.71
Pounds per day - Grading/Excavation	0.11	1.72	0.12	0.09	0.04	0.01	586.02	0.01	0.01	590.14
Tons per const. Period - Grading/Excavation	0.01	0.10	0.01	0.01	0.00	0.00	34.81	0.00	0.00	35.05
Pounds per day - Drainage/Utilities/Sub-Grade	0.08	1.27	0.09	0.07	0.03	0.00	433.14	0.01	0.01	436.19
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.05	0.00	0.00	0.00	0.00	17.15	0.00	0.00	17.27
Pounds per day - Paving	0.06	0.97	0.07	0.05	0.02	0.00	330.69	0.01	0.01	333.02
Tons per const. Period - Paving	0.00	0.02	0.00	0.00	0.00	0.00	6.55	0.00	0.00	6.59
Total tons per construction project	0.01	0.18	0.01	0.01	0.00	0.00	61.20	0.00	0.00	61.63

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

Water Truck Emissions	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Round Trips/Vehicle/Day	Default Values Round Trips/Vehicle/Day	Calculated Trips/day	User Override of Miles/Round Trip	Default Values Miles/Round Trip	Calculated Daily VMT
User Input								
Grubbing/Land Clearing - Exhaust		1		5	5		8.00	40.00
Grading/Excavation - Exhaust		1		5	5		8.00	40.00
Drainage/Utilities/Subgrade		1		5	5		8.00	40.00
Paving		1		5	5		8.00	40.00

2010+ Model Year Mitigation Option Emission Rates	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Grubbing/Land Clearing (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,652.48	0.00	0.26	1,729.92
Grading/Excavation (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,652.48	0.00	0.26	1,729.92
Draining/Utilities/Sub-Grade (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,652.48	0.00	0.26	1,729.92
Paving (grams/mile)	0.03	0.41	3.10	0.11	0.05	0.02	1,651.31	0.00	0.26	1,728.69
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.04	0.32	0.01	0.00	0.00	145.72	0.00	0.02	152.55
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.00	0.00	2.01
Pounds per day - Grading/Excavation	0.00	0.04	0.32	0.01	0.00	0.00	145.72	0.00	0.02	152.55
Tons per const. Period - Grading/Excavation	0.00	0.00	0.02	0.00	0.00	0.00	8.66	0.00	0.00	9.06
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.04	0.32	0.01	0.00	0.00	145.72	0.00	0.02	152.55
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.01	0.00	0.00	0.00	5.77	0.00	0.00	6.04
Pounds per day - Paving	0.00	0.04	0.32	0.01	0.00	0.00	145.62	0.00	0.02	152.44
Tons per const. Period - Paving	0.00	0.00	0.01	0.00	0.00	0.00	2.88	0.00	0.00	3.02
Total tons per construction project	0.00	0.00	0.04	0.00	0.00	0.00	19.23	0.00	0.00	20.13

Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing		0.30	3.00	0.04	0.62	0.01
Fugitive Dust - Grading/Excavation		0.30	3.00	0.18	0.62	0.04
Fugitive Dust - Drainage/Utilities/Subgrade		0.30	3.00	0.12	0.62	0.02

Off-Road Equipment Emissions

Grubbing/Land Clearing	Default Number of Vehicles	Mitigation Option	Default		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Override of Default Number of Vehicles	*Program-estimate*	Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Crawler Tractors	0.24	4.18	0.48	0.02	0.02	0.01	758.27	0.25	0.01	766.45
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Excavators	0.32	7.84	0.64	0.03	0.03	0.01	1,000.68	0.32	0.01	1,011.46
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Tier 4	Signal Boards	0.08	1.56	1.38	0.08	0.07	0.00	147.94	0.02	0.00	148.69
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
				pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing	pounds per day	0.64	13.58	2.50	0.13	0.12	0.02	1,906.89	0.58	0.02	1,926.60
Grubbing/Land Clearing	tons per phase	0.01	0.18	0.03	0.00	0.00	0.00	25.17	0.01	0.00	25.43

Grading/Excavation Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Crawler Tractors	0.24	4.18	0.48	0.02	0.02	0.01	758.27	0.25	0.01	766.45
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Tier 4	Excavators	0.48	11.75	0.95	0.05	0.04	0.02	1,501.02	0.49	0.01	1,517.20
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Graders	0.20	3.52	0.41	0.02	0.02	0.01	640.24	0.21	0.01	647.14
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Rollers	0.16	3.97	0.32	0.02	0.01	0.01	508.12	0.16	0.00	513.60
			Tier 4	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Rubber Tired Loaders	0.19	3.35	0.39	0.02	0.02	0.01	605.62	0.20	0.01	612.16
	2		Tier 4	Scrapers	0.47	8.08	0.93	0.05	0.04	0.02	1,468.15	0.47	0.01	1,483.97
	3		Tier 4	Signal Boards	0.08	1.56	1.38	0.08	0.07	0.00	147.94	0.02	0.00	148.69
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4		Tier 4	Tractors/Loaders/Backhoes	0.38	9.37	0.76	0.04	0.03	0.01	1,208.22	0.39	0.01	1,221.22
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment

If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grading/Excavation	pounds per day	2.20	45.78	5.63	0.29	0.27	0.07	6,837.58	2.18	0.06	6,910.43
Grading/Excavation	tons per phase	0.13	2.72	0.33	0.02	0.02	0.00	406.15	0.13	0.00	410.48

Drainage/Utilities/Subgrade Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Air Compressors	0.10	2.44	0.20	0.01	0.01	0.00	375.26	0.02	0.00	376.62
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Generator Sets	0.16	4.06	0.33	0.02	0.02	0.01	623.04	0.02	0.00	625.01
	1		Tier 4	Graders	0.10	1.76	0.20	0.01	0.01	0.00	320.12	0.10	0.00	323.57
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Plate Compactors	0.02	0.36	0.32	0.02	0.02	0.00	34.48	0.00	0.00	34.65
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Pumps	0.16	4.06	0.33	0.02	0.02	0.01	623.04	0.03	0.00	625.06
			Tier 4	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Rough Terrain Forklifts	0.11	2.61	0.21	0.01	0.01	0.00	333.72	0.11	0.00	337.31
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Scrapers	0.23	4.04	0.47	0.02	0.02	0.01	734.07	0.24	0.01	741.99
	3		Tier 4	Signal Boards	0.08	1.56	1.38	0.08	0.07	0.00	147.94	0.02	0.00	148.69
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Tier 4	Tractors/Loaders/Backhoes	0.28	7.03	0.57	0.03	0.03	0.01	906.17	0.29	0.01	915.91
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Drainage/Utilities/Sub-Grade	pounds per day	1.25	27.92	4.01	0.21	0.19	0.04	4,097.83	0.83	0.03	4,128.82
Drainage/Utilities/Sub-Grade	tons per phase	0.05	1.11	0.16	0.01	0.01	0.00	162.27	0.03	0.00	163.50

Paving Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Tier 4	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Tier 4	Pavers	0.14	3.56	0.29	0.01	0.01	0.00	454.99	0.15	0.00	459.90
	1		Tier 4	Paving Equipment	0.13	3.10	0.25	0.01	0.01	0.00	394.32	0.13	0.00	398.57
			Tier 4	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Tier 4	Rollers	0.16	3.97	0.32	0.02	0.01	0.01	508.12	0.16	0.00	513.60
			Tier 4	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Tier 4	Signal Boards	0.08	1.56	1.38	0.08	0.07	0.00	147.94	0.02	0.00	148.69
			Tier 4	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3		Tier 4	Tractors/Loaders/Backhoes	0.28	7.03	0.57	0.03	0.03	0.01	906.17	0.29	0.01	915.91
			Tier 4	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Tier 4	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Paving	pounds per day	0.79	19.22	2.82	0.15	0.14	0.03	2,411.54	0.75	0.02	2,436.68
	Paving	tons per phase	0.02	0.38	0.06	0.00	0.00	0.00	47.75	0.01	0.00	48.25
Total Emissions all Phases (tons per construction period) =>			0.20	4.38	0.58	0.03	0.03	0.01	641.35	0.18	0.01	647.66

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187	4.00	8
Off-Highway Tractors		124		8
Off-Highway Trucks		402		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		247		8
Rubber Tired Loaders		203		8
Scrapers		367	4.00	8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET

Bristol P1 Existing Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bristol P1 Existing
Operational Year	2023
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	33.69633585549636, -117.88747233145176
County	Orange
City	Santa Ana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5946
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.8

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
Regional Shopping Center	244	1000sqft	5.60	244,120	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	57.9	60.4	26.7	291	0.51	0.42	9.90	10.3	0.40	1.94	2.34	173	54,530	54,703	21.5	2.73	221	56,276
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	53.5	56.2	28.8	266	0.49	0.39	9.90	10.3	0.36	1.94	2.30	173	52,515	52,688	21.8	2.87	6.88	54,094
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	55.2	57.8	27.9	272	0.46	0.39	9.16	9.54	0.37	1.79	2.16	173	49,548	49,721	21.6	2.75	89.1	51,170
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.1	10.6	5.09	49.7	0.08	0.07	1.67	1.74	0.07	0.33	0.39	28.6	8,203	8,232	3.58	0.46	14.7	8,472

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

Mobile	54.1	51.0	26.2	270	0.51	0.36	9.90	10.3	0.33	1.94	2.27	—	51,566	51,566	3.86	2.62	220	52,664
Area	3.77	9.32	0.18	21.2	< 0.005	0.03	—	0.03	0.04	—	0.04	—	87.3	87.3	< 0.005	< 0.005	—	87.6
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	2,759	2,759	0.26	0.03	—	2,773
Water	—	—	—	—	—	—	—	—	—	—	—	34.7	118	152	3.56	0.09	—	267
Waste	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.8	0.00	—	483
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Total	57.9	60.4	26.7	291	0.51	0.42	9.90	10.3	0.40	1.94	2.34	173	54,530	54,703	21.5	2.73	221	56,276
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	53.5	50.3	28.4	266	0.49	0.36	9.90	10.3	0.33	1.94	2.27	—	49,639	49,639	4.14	2.76	5.71	50,569
Area	—	5.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	2,759	2,759	0.26	0.03	—	2,773
Water	—	—	—	—	—	—	—	—	—	—	—	34.7	118	152	3.56	0.09	—	267
Waste	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.8	0.00	—	483
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Total	53.5	56.2	28.8	266	0.49	0.39	9.90	10.3	0.36	1.94	2.30	173	52,515	52,688	21.8	2.87	6.88	54,094
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	52.6	49.6	27.4	257	0.46	0.34	9.16	9.50	0.31	1.79	2.11	—	46,612	46,612	3.99	2.64	87.9	47,586
Area	2.58	8.23	0.12	14.5	< 0.005	0.02	—	0.02	0.03	—	0.03	—	59.8	59.8	< 0.005	< 0.005	—	60.0
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	2,759	2,759	0.26	0.03	—	2,773
Water	—	—	—	—	—	—	—	—	—	—	—	34.7	118	152	3.56	0.09	—	267
Waste	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.8	0.00	—	483
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Total	55.2	57.8	27.9	272	0.46	0.39	9.16	9.54	0.37	1.79	2.16	173	49,548	49,721	21.6	2.75	89.1	51,170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.60	9.05	4.99	47.0	0.08	0.06	1.67	1.73	0.06	0.33	0.38	—	7,717	7,717	0.66	0.44	14.5	7,878
Area	0.47	1.50	0.02	2.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.90	9.90	< 0.005	< 0.005	—	9.94

Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	457	457	0.04	< 0.005	—	459
Water	—	—	—	—	—	—	—	—	—	—	—	5.74	19.5	25.2	0.59	0.01	—	44.2
Waste	—	—	—	—	—	—	—	—	—	—	—	22.9	0.00	22.9	2.29	0.00	—	80.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	10.1	10.6	5.09	49.7	0.08	0.07	1.67	1.74	0.07	0.33	0.39	28.6	8,203	8,232	3.58	0.46	14.7	8,472

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	54.1	51.0	26.2	270	0.51	0.36	9.90	10.3	0.33	1.94	2.27	—	51,566	51,566	3.86	2.62	220	52,664
Total	54.1	51.0	26.2	270	0.51	0.36	9.90	10.3	0.33	1.94	2.27	—	51,566	51,566	3.86	2.62	220	52,664
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	53.5	50.3	28.4	266	0.49	0.36	9.90	10.3	0.33	1.94	2.27	—	49,639	49,639	4.14	2.76	5.71	50,569
Total	53.5	50.3	28.4	266	0.49	0.36	9.90	10.3	0.33	1.94	2.27	—	49,639	49,639	4.14	2.76	5.71	50,569
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	9.60	9.05	4.99	47.0	0.08	0.06	1.67	1.73	0.06	0.33	0.38	—	7,717	7,717	0.66	0.44	14.5	7,878

Total	9.60	9.05	4.99	47.0	0.08	0.06	1.67	1.73	0.06	0.33	0.38	—	7,717	7,717	0.66	0.44	14.5	7,878

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	2,290	2,290	0.22	0.03	—	2,303
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,290	2,290	0.22	0.03	—	2,303
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	2,290	2,290	0.22	0.03	—	2,303
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,290	2,290	0.22	0.03	—	2,303
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	379	379	0.04	< 0.005	—	381
Total	—	—	—	—	—	—	—	—	—	—	—	—	379	379	0.04	< 0.005	—	381

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	468	468	0.04	< 0.005	—	470
Total	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	468	468	0.04	< 0.005	—	470
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	468	468	0.04	< 0.005	—	470
Total	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	468	468	0.04	< 0.005	—	470
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.5	77.5	0.01	< 0.005	—	77.8
Total	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.5	77.5	0.01	< 0.005	—	77.8

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	5.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.77	3.48	0.18	21.2	< 0.005	0.03	—	0.03	0.04	—	0.04	—	87.3	87.3	< 0.005	< 0.005	—	87.6
Total	3.77	9.32	0.18	21.2	< 0.005	0.03	—	0.03	0.04	—	0.04	—	87.3	87.3	< 0.005	< 0.005	—	87.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	5.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	5.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.47	0.44	0.02	2.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.90	9.90	< 0.005	< 0.005	—	9.94
Total	0.47	1.50	0.02	2.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.90	9.90	< 0.005	< 0.005	—	9.94

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	34.7	118	152	3.56	0.09	—	267
Total	—	—	—	—	—	—	—	—	—	—	—	34.7	118	152	3.56	0.09	—	267
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	34.7	118	152	3.56	0.09	—	267
Total	—	—	—	—	—	—	—	—	—	—	—	34.7	118	152	3.56	0.09	—	267
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	5.74	19.5	25.2	0.59	0.01	—	44.2
Total	—	—	—	—	—	—	—	—	—	—	—	5.74	19.5	25.2	0.59	0.01	—	44.2

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

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

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.8	0.00	—	483
Total	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.8	0.00	—	483
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.8	0.00	—	483
Total	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.8	0.00	—	483
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	22.9	0.00	22.9	2.29	0.00	—	80.0
Total	—	—	—	—	—	—	—	—	—	—	—	22.9	0.00	22.9	2.29	0.00	—	80.0

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Regional Shopping Center	8,132	8,132	8,132	2,968,048	27,487	30,718	30,718	10,369,831

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	366,180	122,060	—

5.10.3. Landscape Equipment

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)
Regional Shopping Center	2,397,592	349	0.0330	0.0040	1,461,533

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Regional Shopping Center	18,082,584	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Regional Shopping Center	256.33	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

Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.23	annual days of extreme heat
Extreme Precipitation	3.60	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	53.7
AQ-PM	59.2
AQ-DPM	30.6
Drinking Water	44.6
Lead Risk Housing	34.5
Pesticides	0.00
Toxic Releases	86.8
Traffic	55.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	47.4
Haz Waste Facilities/Generators	74.7
Impaired Water Bodies	0.00
Solid Waste	0.00

Sensitive Population	—
Asthma	42.3
Cardio-vascular	34.4
Low Birth Weights	36.7
Socioeconomic Factor Indicators	—
Education	43.4
Housing	53.6
Linguistic	37.7
Poverty	50.2
Unemployment	3.58

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	59.19414859
Employed	97.42076222
Median HI	59.19414859
Education	—
Bachelor's or higher	73.0784037
High school enrollment	100
Preschool enrollment	9.713845759
Transportation	—
Auto Access	57.21801617
Active commuting	16.10419607
Social	—
2-parent households	16.88694983

Voting	23.36712434
Neighborhood	—
Alcohol availability	51.4307712
Park access	41.76825356
Retail density	84.88387014
Supermarket access	69.88322854
Tree canopy	67.77877582
Housing	—
Homeownership	21.2498396
Housing habitability	46.43911202
Low-inc homeowner severe housing cost burden	27.30655717
Low-inc renter severe housing cost burden	80.90594123
Uncrowded housing	40.60053895
Health Outcomes	—
Insured adults	46.18247145
Arthritis	92.6
Asthma ER Admissions	65.9
High Blood Pressure	92.0
Cancer (excluding skin)	60.5
Asthma	80.2
Coronary Heart Disease	91.8
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	90.6
Life Expectancy at Birth	65.4
Cognitively Disabled	35.0
Physically Disabled	85.5
Heart Attack ER Admissions	71.9

Mental Health Not Good	73.6
Chronic Kidney Disease	93.4
Obesity	86.0
Pedestrian Injuries	44.9
Physical Health Not Good	85.2
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	10.6
Current Smoker	71.8
No Leisure Time for Physical Activity	71.9
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	71.1
Elderly	60.7
English Speaking	61.5
Foreign-born	71.2
Outdoor Workers	41.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.4
Traffic Density	53.3
Traffic Access	57.9
Other Indices	—
Hardship	23.6
Other Decision Support	—
2016 Voting	60.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	34.0
Healthy Places Index Score for Project Location (b)	57.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	per traffic study

Bristol P2 Existing Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bristol P2 Existing
Operational Year	2023
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	33.698665945125796, -117.886274986746
County	Orange
City	Santa Ana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5946
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.8

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
Regional Shopping Center	36.5	1000sqft	0.84	36,520	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.66	9.03	4.00	43.6	0.08	0.06	1.48	1.54	0.06	0.29	0.35	25.8	8,160	8,186	3.22	0.41	33.1	8,421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.01	8.41	4.31	39.8	0.07	0.06	1.48	1.54	0.05	0.29	0.34	25.8	7,858	7,884	3.26	0.43	1.03	8,095
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.26	8.65	4.17	40.7	0.07	0.06	1.37	1.43	0.06	0.27	0.32	25.8	7,414	7,440	3.24	0.41	13.3	7,657
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.51	1.58	0.76	7.43	0.01	0.01	0.25	0.26	0.01	0.05	0.06	4.28	1,228	1,232	0.54	0.07	2.21	1,268

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

Mobile	8.09	7.64	3.92	40.3	0.08	0.05	1.48	1.54	0.05	0.29	0.34	—	7,717	7,717	0.58	0.39	32.9	7,881
Area	0.56	1.39	0.03	3.17	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	—	13.1	13.1	< 0.005	< 0.005	—	13.1
Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	413	413	0.04	< 0.005	—	415
Water	—	—	—	—	—	—	—	—	—	—	—	5.18	17.6	22.8	0.53	0.01	—	39.9
Waste	—	—	—	—	—	—	—	—	—	—	—	20.7	0.00	20.7	2.07	0.00	—	72.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18	
Total	8.66	9.03	4.00	43.6	0.08	0.06	1.48	1.54	0.06	0.29	0.35	25.8	8,160	8,186	3.22	0.41	33.1	8,421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.00	7.53	4.26	39.8	0.07	0.05	1.48	1.54	0.05	0.29	0.34	—	7,428	7,428	0.62	0.41	0.85	7,567
Area	—	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	413	413	0.04	< 0.005	—	415
Water	—	—	—	—	—	—	—	—	—	—	—	5.18	17.6	22.8	0.53	0.01	—	39.9
Waste	—	—	—	—	—	—	—	—	—	—	—	20.7	0.00	20.7	2.07	0.00	—	72.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18	
Total	8.01	8.41	4.31	39.8	0.07	0.06	1.48	1.54	0.05	0.29	0.34	25.8	7,858	7,884	3.26	0.43	1.03	8,095
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.87	7.42	4.10	38.5	0.07	0.05	1.37	1.42	0.05	0.27	0.32	—	6,975	6,975	0.60	0.39	13.2	7,121
Area	0.39	1.23	0.02	2.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.95	8.95	< 0.005	< 0.005	—	8.98
Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	413	413	0.04	< 0.005	—	415
Water	—	—	—	—	—	—	—	—	—	—	—	5.18	17.6	22.8	0.53	0.01	—	39.9
Waste	—	—	—	—	—	—	—	—	—	—	—	20.7	0.00	20.7	2.07	0.00	—	72.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18	
Total	8.26	8.65	4.17	40.7	0.07	0.06	1.37	1.43	0.06	0.27	0.32	25.8	7,414	7,440	3.24	0.41	13.3	7,657
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.44	1.35	0.75	7.03	0.01	0.01	0.25	0.26	0.01	0.05	0.06	—	1,155	1,155	0.10	0.07	2.18	1,179
Area	0.07	0.22	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.48	1.48	< 0.005	< 0.005	—	1.49

Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	68.3	68.3	0.01	< 0.005	—	68.7
Water	—	—	—	—	—	—	—	—	—	—	—	0.86	2.91	3.77	0.09	< 0.005	—	6.61
Waste	—	—	—	—	—	—	—	—	—	—	—	3.42	0.00	3.42	0.34	0.00	—	12.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	1.51	1.58	0.76	7.43	0.01	0.01	0.25	0.26	0.01	0.05	0.06	4.28	1,228	1,232	0.54	0.07	2.21	1,268

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	8.09	7.64	3.92	40.3	0.08	0.05	1.48	1.54	0.05	0.29	0.34	—	7,717	7,717	0.58	0.39	32.9	7,881
Total	8.09	7.64	3.92	40.3	0.08	0.05	1.48	1.54	0.05	0.29	0.34	—	7,717	7,717	0.58	0.39	32.9	7,881
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	8.00	7.53	4.26	39.8	0.07	0.05	1.48	1.54	0.05	0.29	0.34	—	7,428	7,428	0.62	0.41	0.85	7,567
Total	8.00	7.53	4.26	39.8	0.07	0.05	1.48	1.54	0.05	0.29	0.34	—	7,428	7,428	0.62	0.41	0.85	7,567
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	1.44	1.35	0.75	7.03	0.01	0.01	0.25	0.26	0.01	0.05	0.06	—	1,155	1,155	0.10	0.07	2.18	1,179

Total	1.44	1.35	0.75	7.03	0.01	0.01	0.25	0.26	0.01	0.05	0.06	—	1,155	1,155	0.10	0.07	2.18	1,179

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	343	343	0.03	< 0.005	—	345
Total	—	—	—	—	—	—	—	—	—	—	—	—	343	343	0.03	< 0.005	—	345
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	343	343	0.03	< 0.005	—	345
Total	—	—	—	—	—	—	—	—	—	—	—	—	343	343	0.03	< 0.005	—	345
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	56.7	56.7	0.01	< 0.005	—	57.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	56.7	56.7	0.01	< 0.005	—	57.0

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	70.1	70.1	0.01	< 0.005	—	70.3
Total	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	70.1	70.1	0.01	< 0.005	—	70.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	70.1	70.1	0.01	< 0.005	—	70.3
Total	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	70.1	70.1	0.01	< 0.005	—	70.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.6	11.6	< 0.005	< 0.005	—	11.6
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.6	11.6	< 0.005	< 0.005	—	11.6

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.56	0.52	0.03	3.17	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	—	13.1	13.1	< 0.005	< 0.005	—	13.1
Total	0.56	1.39	0.03	3.17	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	—	13.1	13.1	< 0.005	< 0.005	—	13.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.07	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.48	1.48	< 0.005	< 0.005	—	1.49
Total	0.07	0.22	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.48	1.48	< 0.005	< 0.005	—	1.49

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	5.18	17.6	22.8	0.53	0.01	—	39.9
Total	—	—	—	—	—	—	—	—	—	—	—	5.18	17.6	22.8	0.53	0.01	—	39.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	5.18	17.6	22.8	0.53	0.01	—	39.9
Total	—	—	—	—	—	—	—	—	—	—	—	5.18	17.6	22.8	0.53	0.01	—	39.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.86	2.91	3.77	0.09	< 0.005	—	6.61
Total	—	—	—	—	—	—	—	—	—	—	—	0.86	2.91	3.77	0.09	< 0.005	—	6.61

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

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

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	20.7	0.00	20.7	2.07	0.00	—	72.3
Total	—	—	—	—	—	—	—	—	—	—	—	20.7	0.00	20.7	2.07	0.00	—	72.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	20.7	0.00	20.7	2.07	0.00	—	72.3
Total	—	—	—	—	—	—	—	—	—	—	—	20.7	0.00	20.7	2.07	0.00	—	72.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	3.42	0.00	3.42	0.34	0.00	—	12.0
Total	—	—	—	—	—	—	—	—	—	—	—	3.42	0.00	3.42	0.34	0.00	—	12.0

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Regional Shopping Center	1,217	1,217	1,217	444,149	4,113	4,597	4,597	1,551,777

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	54,780	18,260	—

5.10.3. Landscape Equipment

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)
Regional Shopping Center	358,676	349	0.0330	0.0040	218,643

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Regional Shopping Center	2,705,128	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Regional Shopping Center	38.35	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

Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.23	annual days of extreme heat
Extreme Precipitation	3.60	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	53.7
AQ-PM	59.2
AQ-DPM	30.6
Drinking Water	44.6
Lead Risk Housing	34.5
Pesticides	0.00
Toxic Releases	86.8
Traffic	55.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	47.4
Haz Waste Facilities/Generators	74.7
Impaired Water Bodies	0.00
Solid Waste	0.00

Sensitive Population	—
Asthma	42.3
Cardio-vascular	34.4
Low Birth Weights	36.7
Socioeconomic Factor Indicators	—
Education	43.4
Housing	53.6
Linguistic	37.7
Poverty	50.2
Unemployment	3.58

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	59.19414859
Employed	97.42076222
Median HI	59.19414859
Education	—
Bachelor's or higher	73.0784037
High school enrollment	100
Preschool enrollment	9.713845759
Transportation	—
Auto Access	57.21801617
Active commuting	16.10419607
Social	—
2-parent households	16.88694983

Voting	23.36712434
Neighborhood	—
Alcohol availability	51.4307712
Park access	41.76825356
Retail density	84.88387014
Supermarket access	69.88322854
Tree canopy	67.77877582
Housing	—
Homeownership	21.2498396
Housing habitability	46.43911202
Low-inc homeowner severe housing cost burden	27.30655717
Low-inc renter severe housing cost burden	80.90594123
Uncrowded housing	40.60053895
Health Outcomes	—
Insured adults	46.18247145
Arthritis	92.6
Asthma ER Admissions	65.9
High Blood Pressure	92.0
Cancer (excluding skin)	60.5
Asthma	80.2
Coronary Heart Disease	91.8
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	90.6
Life Expectancy at Birth	65.4
Cognitively Disabled	35.0
Physically Disabled	85.5
Heart Attack ER Admissions	71.9

Mental Health Not Good	73.6
Chronic Kidney Disease	93.4
Obesity	86.0
Pedestrian Injuries	44.9
Physical Health Not Good	85.2
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	10.6
Current Smoker	71.8
No Leisure Time for Physical Activity	71.9
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	71.1
Elderly	60.7
English Speaking	61.5
Foreign-born	71.2
Outdoor Workers	41.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.4
Traffic Density	53.3
Traffic Access	57.9
Other Indices	—
Hardship	23.6
Other Decision Support	—
2016 Voting	60.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	34.0
Healthy Places Index Score for Project Location (b)	57.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	per traffic study

Bristol P3 Existing Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bristol P3 Existing
Operational Year	2023
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	33.69852878405041, -117.88747102650699
County	Orange
City	Santa Ana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5946
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.8

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
Regional Shopping Center	184	1000sqft	4.23	184,420	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	43.7	45.6	20.2	220	0.38	0.31	7.48	7.79	0.30	1.47	1.77	131	41,183	41,313	16.2	2.06	167	42,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.4	42.4	21.8	201	0.37	0.29	7.48	7.77	0.27	1.47	1.74	131	39,661	39,791	16.4	2.17	5.19	40,853
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	41.7	43.7	21.1	206	0.35	0.29	6.92	7.21	0.28	1.36	1.63	131	37,420	37,551	16.3	2.08	67.3	38,646
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.61	7.97	3.84	37.5	0.06	0.05	1.26	1.32	0.05	0.25	0.30	21.6	6,195	6,217	2.70	0.34	11.1	6,398

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

Mobile	40.8	38.5	19.8	204	0.38	0.27	7.48	7.75	0.25	1.47	1.72	—	38,944	38,944	2.91	1.98	166	39,773
Area	2.85	7.04	0.14	16.0	< 0.005	0.02	—	0.02	0.03	—	0.03	—	66.0	66.0	< 0.005	< 0.005	—	66.2
Energy	0.03	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	2,084	2,084	0.20	0.02	—	2,095
Water	—	—	—	—	—	—	—	—	—	—	—	26.2	88.8	115	2.69	0.06	—	202
Waste	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.89	0.89
Total	43.7	45.6	20.2	220	0.38	0.31	7.48	7.79	0.30	1.47	1.77	131	41,183	41,313	16.2	2.06	167	42,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	40.4	38.0	21.5	201	0.37	0.27	7.48	7.75	0.25	1.47	1.72	—	37,488	37,488	3.13	2.08	4.31	38,191
Area	—	4.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	2,084	2,084	0.20	0.02	—	2,095
Water	—	—	—	—	—	—	—	—	—	—	—	26.2	88.8	115	2.69	0.06	—	202
Waste	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.89	0.89
Total	40.4	42.4	21.8	201	0.37	0.29	7.48	7.77	0.27	1.47	1.74	131	39,661	39,791	16.4	2.17	5.19	40,853
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	39.7	37.4	20.7	194	0.34	0.25	6.92	7.17	0.24	1.36	1.59	—	35,203	35,203	3.02	1.99	66.4	35,938
Area	1.95	6.22	0.09	11.0	< 0.005	0.01	—	0.01	0.02	—	0.02	—	45.2	45.2	< 0.005	< 0.005	—	45.3
Energy	0.03	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	2,084	2,084	0.20	0.02	—	2,095
Water	—	—	—	—	—	—	—	—	—	—	—	26.2	88.8	115	2.69	0.06	—	202
Waste	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.89	0.89
Total	41.7	43.7	21.1	206	0.35	0.29	6.92	7.21	0.28	1.36	1.63	131	37,420	37,551	16.3	2.08	67.3	38,646
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.25	6.83	3.77	35.5	0.06	0.05	1.26	1.31	0.04	0.25	0.29	—	5,828	5,828	0.50	0.33	11.0	5,950
Area	0.36	1.13	0.02	2.00	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.48	7.48	< 0.005	< 0.005	—	7.51

Energy	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	345	345	0.03	< 0.005	—	347
Water	—	—	—	—	—	—	—	—	—	—	—	4.33	14.7	19.0	0.45	0.01	—	33.4
Waste	—	—	—	—	—	—	—	—	—	—	—	17.3	0.00	17.3	1.73	0.00	—	60.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.15	0.15
Total	7.61	7.97	3.84	37.5	0.06	0.05	1.26	1.32	0.05	0.25	0.30	21.6	6,195	6,217	2.70	0.34	11.1	6,398

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	40.8	38.5	19.8	204	0.38	0.27	7.48	7.75	0.25	1.47	1.72	—	38,944	38,944	2.91	1.98	166	39,773
Total	40.8	38.5	19.8	204	0.38	0.27	7.48	7.75	0.25	1.47	1.72	—	38,944	38,944	2.91	1.98	166	39,773
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	40.4	38.0	21.5	201	0.37	0.27	7.48	7.75	0.25	1.47	1.72	—	37,488	37,488	3.13	2.08	4.31	38,191
Total	40.4	38.0	21.5	201	0.37	0.27	7.48	7.75	0.25	1.47	1.72	—	37,488	37,488	3.13	2.08	4.31	38,191
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	7.25	6.83	3.77	35.5	0.06	0.05	1.26	1.31	0.04	0.25	0.29	—	5,828	5,828	0.50	0.33	11.0	5,950

Total	7.25	6.83	3.77	35.5	0.06	0.05	1.26	1.31	0.04	0.25	0.29	—	5,828	5,828	0.50	0.33	11.0	5,950

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	1,730	1,730	0.16	0.02	—	1,740
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,730	1,730	0.16	0.02	—	1,740
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	1,730	1,730	0.16	0.02	—	1,740
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,730	1,730	0.16	0.02	—	1,740
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	286	286	0.03	< 0.005	—	288
Total	—	—	—	—	—	—	—	—	—	—	—	—	286	286	0.03	< 0.005	—	288

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.03	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	354	354	0.03	< 0.005	—	355
Total	0.03	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	354	354	0.03	< 0.005	—	355
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.03	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	354	354	0.03	< 0.005	—	355
Total	0.03	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	354	354	0.03	< 0.005	—	355
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	58.6	58.6	0.01	< 0.005	—	58.7
Total	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	58.6	58.6	0.01	< 0.005	—	58.7

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	3.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.85	2.63	0.14	16.0	< 0.005	0.02	—	0.02	0.03	—	0.03	—	66.0	66.0	< 0.005	< 0.005	—	66.2
Total	2.85	7.04	0.14	16.0	< 0.005	0.02	—	0.02	0.03	—	0.03	—	66.0	66.0	< 0.005	< 0.005	—	66.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	3.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	4.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.36	0.33	0.02	2.00	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.48	7.48	< 0.005	< 0.005	—	7.51
Total	0.36	1.13	0.02	2.00	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.48	7.48	< 0.005	< 0.005	—	7.51

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	26.2	88.8	115	2.69	0.06	—	202
Total	—	—	—	—	—	—	—	—	—	—	—	26.2	88.8	115	2.69	0.06	—	202
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	26.2	88.8	115	2.69	0.06	—	202
Total	—	—	—	—	—	—	—	—	—	—	—	26.2	88.8	115	2.69	0.06	—	202
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	4.33	14.7	19.0	0.45	0.01	—	33.4
Total	—	—	—	—	—	—	—	—	—	—	—	4.33	14.7	19.0	0.45	0.01	—	33.4

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

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

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365
Total	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365
Total	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	17.3	0.00	17.3	1.73	0.00	—	60.5
Total	—	—	—	—	—	—	—	—	—	—	—	17.3	0.00	17.3	1.73	0.00	—	60.5

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.89	0.89
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.89	0.89
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.89	0.89
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.89	0.89
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.15	0.15
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.15	0.15

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Regional Shopping Center	6,141	6,141	6,141	2,241,533	20,759	23,199	23,199	7,831,517

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	276,630	92,210	—

5.10.3. Landscape Equipment

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)
Regional Shopping Center	1,811,256	349	0.0330	0.0040	1,104,112

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Regional Shopping Center	13,660,454	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Regional Shopping Center	193.64	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

Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.23	annual days of extreme heat
Extreme Precipitation	3.60	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	53.7
AQ-PM	59.2
AQ-DPM	30.6
Drinking Water	44.6
Lead Risk Housing	34.5
Pesticides	0.00
Toxic Releases	86.8
Traffic	55.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	47.4
Haz Waste Facilities/Generators	74.7
Impaired Water Bodies	0.00
Solid Waste	0.00

Sensitive Population	—
Asthma	42.3
Cardio-vascular	34.4
Low Birth Weights	36.7
Socioeconomic Factor Indicators	—
Education	43.4
Housing	53.6
Linguistic	37.7
Poverty	50.2
Unemployment	3.58

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	59.19414859
Employed	97.42076222
Median HI	59.19414859
Education	—
Bachelor's or higher	73.0784037
High school enrollment	100
Preschool enrollment	9.713845759
Transportation	—
Auto Access	57.21801617
Active commuting	16.10419607
Social	—
2-parent households	16.88694983

Voting	23.36712434
Neighborhood	—
Alcohol availability	51.4307712
Park access	41.76825356
Retail density	84.88387014
Supermarket access	69.88322854
Tree canopy	67.77877582
Housing	—
Homeownership	21.2498396
Housing habitability	46.43911202
Low-inc homeowner severe housing cost burden	27.30655717
Low-inc renter severe housing cost burden	80.90594123
Uncrowded housing	40.60053895
Health Outcomes	—
Insured adults	46.18247145
Arthritis	92.6
Asthma ER Admissions	65.9
High Blood Pressure	92.0
Cancer (excluding skin)	60.5
Asthma	80.2
Coronary Heart Disease	91.8
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	90.6
Life Expectancy at Birth	65.4
Cognitively Disabled	35.0
Physically Disabled	85.5
Heart Attack ER Admissions	71.9

Mental Health Not Good	73.6
Chronic Kidney Disease	93.4
Obesity	86.0
Pedestrian Injuries	44.9
Physical Health Not Good	85.2
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	10.6
Current Smoker	71.8
No Leisure Time for Physical Activity	71.9
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	71.1
Elderly	60.7
English Speaking	61.5
Foreign-born	71.2
Outdoor Workers	41.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.4
Traffic Density	53.3
Traffic Access	57.9
Other Indices	—
Hardship	23.6
Other Decision Support	—
2016 Voting	60.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	34.0
Healthy Places Index Score for Project Location (b)	57.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	per traffic study