Appendix B Air Quality Analysis

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Air Quality and Greenhouse Gas Appendix

1. AIR QUALITY AND GREENHOUSE GAS BACKGROUND AND MODELING DATA

1.1 AIR QUALITY

1.1.1 Air Quality Regulatory Setting

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (South Coast AQMD). However, South Coast AQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect “sensitive receptors” most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Ozone (O_3)[3]	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)[4]	Annual Arithmetic Mean	*	0.010 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	*	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)[5,6]	Annual Arithmetic Mean	12 µg/m^3	9 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)[7]	24 hours	25 µg/m^3	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2024, USEPA 2025a.

Notes: ppm: parts per million; µg/m^3: micrograms per cubic meter

* Standard has not been established for this pollutant/duration by this entity.

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

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

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

4 On December 27, 2024, the secondary annual SO_2 standard was revised to an annual average, averaged over three consecutive years, with a level of 10 parts per billion (ppb).

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

6 On February 7, 2024, the national annual $PM_{2.5}$ standard was lowered from 12 µg/m^3 to 9 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary), secondary annual $PM_{2.5}$ standard, and PM_{10} standards (primary and secondary) were retained.

7 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

AIR POLLUTANTS OF CONCERN

Criteria Air Pollutants

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources and include CO, VOC, NO_2, SO_X, PM_{10}, $PM_{2.5}$, and Pb. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO_X) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and NO_2 are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (South Coast AQMD 2005; USEPA 2025b). The SoCAB is designated as being in attainment under the California AAQS and attainment (serious maintenance) under the National AAQS (CARB 2026a).

Volatile Organic Compounds (VOC) are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (South Coast AQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O_3, South Coast AQMD has established a significance threshold (South Coast AQMD 2023). The health effects for ozone are described later in this section.

Nitrogen Oxides (NO_X) are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_X produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (South Coast AQMD 2005; USEPA 2025b). The SoCAB is designated in attainment (maintenance) under the National AAQS and attainment under the California AAQS (CARB 2026a).[1]

Sulfur Dioxide (SO_2) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO_2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (South Coast AQMD 2005; USEPA 2025b). The SoCAB is designated as attainment under the California and National AAQS (CARB 2026a).

Suspended Particulate Matter (PM_{10} and $PM_{2.5}$) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤0.01 millimeter). Inhalable fine particles, or $PM_{2.5}$, have an

[1] The CA-60 near-road portion of San Bernardino, Riverside and Los Angeles Counties has recently been redesignated as an attainment area based on data collected between 2018 and 2020 (South Coast AQMD 2022).

aerodynamic diameter of 2.5 microns or less (i.e., ≤0.002.5 millimeter). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The USEPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (South Coast AQMD 2005). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.0001 millimeter) have human health implications because their toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2013). However, the USEPA and the California Air Resources Board (CARB) have not adopted AAQS to regulate these particulates. Diesel particulate matter is classified by CARB as a carcinogen (CARB 2026b). Particulate matter can also cause environmental effects such as visibility impairment,[2] environmental damage,[3] and aesthetic damage[4] (South Coast AQMD 2005; USEPA 2025b). The SoCAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2026a).[5]

Ozone (O_3) is a key ingredient of "smog" and is a gas that is formed when VOCs and NO_X, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (South Coast

[2] $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

[3] Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

[4] Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

[5] CARB approved the South Coast AQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM_{10} standards from 2004 to 2007. The USEPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

AQMD 2005; USEPA 2025b). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2026a).

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; USEPA 2018). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the USEPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the USEPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.[6] As a result of these violations, the Los Angeles County portion of the SoCAB is designated as nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2026a). However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). CARB's State Implementation Plan (SIP) revision was submitted to the USEPA for approval. Because emissions of lead are found only in projects that are permitted by South Coast AQMD, lead is not a pollutant of concern for the proposed project.

Table 2, *Criteria Air Pollutant Health Effects Summary*, summarizes the potential health effects associated with the criteria air pollutants.

[6] Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (South Coast AQMD 2012).

Table 2 Criteria Air Pollutant Health Effects Summary

Pollutant	Health Effects	Examples of Sources
Carbon Monoxide (CO)	▪ Chest pain in heart patients ▪ Headaches, nausea ▪ Reduced mental alertness ▪ Death at very high levels	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Ozone (O_3)	▪ Cough, chest tightness ▪ Difficulty taking a deep breath ▪ Worsened asthma symptoms ▪ Lung inflammation	Atmospheric reaction of organic gases with nitrogen oxides in sunlight
Nitrogen Dioxide (NO_2)	▪ Increased response to allergens ▪ Aggravation of respiratory illness	Same as carbon monoxide sources
Particulate Matter (PM_{10} and $PM_{2.5}$)	▪ Hospitalizations for worsened heart diseases ▪ Emergency room visits for asthma ▪ Premature death	Cars and trucks (particularly diesels) Fireplaces and woodstoves Windblown dust from overlays, agriculture, and construction
Sulfur Dioxide (SO_2)	▪ Aggravation of respiratory disease (e.g., asthma and emphysema) ▪ Reduced lung function	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, and industrial processes
Lead (Pb)	▪ Behavioral and learning disabilities in children ▪ Nervous system impairment	Contaminated soil

Source: CARB 2026c.

Toxic Air Contaminants

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

CARB has promulgated the following specific rules to limit TAC emissions:

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Community Risk

In addition, to reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. CARB recommendations are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

AIR QUALITY MANAGEMENT PLANNING

The South Coast AQMD is the agency responsible for improving air quality in the SoCAB and ensuring that the National and California AAQS are attained and maintained. South Coast AQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2022 AQMP

South Coast AQMD adopted the 2022 AQMP on December 2, 2022, which serves as an update to the 2017 AQMP. On October 1, 2015, the USEPA strengthened the National AAQS for ground-level ozone, lowering the primary and secondary ozone standard levels to 70 parts per billion (ppb) (2015 Ozone National AAQS.). The SoCAB is currently classified as an "extreme" nonattainment for the 2015 Ozone National AAQS. Meeting the 2015 federal ozone standard requires reducing NO_x emissions, the key pollutant that creates ozone, by 67 percent more than is required by adopted rules and regulations in 2037. The only way to achieve the required NO_x reductions is through extensive use of zero emission (ZE) technologies across all stationary and mobile sources. South Coast AQMD's primary authority is over stationary sources which account for approximately 20 percent of NO_x emissions. The overwhelming majority of NO_x emissions are from heavy-duty trucks, ships and other State and federally regulated mobile sources that are mostly beyond the South Coast AQMD's control. The region will not meet the standard absent significant federal action. In addition to federal action, the 2022 AQMP requires substantial reliance on future deployment of advanced technologies to meet the standard. The control strategy for the 2022 AQMP includes aggressive new regulations and the development

of incentive programs to support early deployment of advanced technologies. The two key areas for incentive programs are (1) promoting widespread deployment of available ZE and low-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. South Coast AQMD is prioritizing distribution of incentive funding in Environmental Justice areas and seeking opportunities to focus benefits on the most disadvantaged communities (South Coast AQMD 2022).

Lead Implementation Plan

In 2008, USEPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB, outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the USEPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the USEPA for approval and was approved in March 2014 (CARB 2014).

South Coast AQMD $PM_{2.5}$ Redesignation Request and Maintenance Plan

In 1997, the USEPA adopted the 24-hour fine $PM_{2.5}$ standard of 65 micrograms per cubic meter ($\mu g/m^3$). In 2006, this standard was lowered to a more health-protective level of 35 $\mu g/m^3$. The SoCAB is designated nonattainment for both the 65 and 35 $\mu g/m^3$ 24-hour $PM_{2.5}$ standards (24-hour $PM_{2.5}$ standards). In 2020, monitored data demonstrated that the SoCAB attained both 24-hour $PM_{2.5}$ standards. The South Coast AQMD has developed the 2021 Redesignation Request and Maintenance Plan for the 1997 and 2006 24-hour $PM_{2.5}$ Standards demonstrating that the SoCAB has met the requirements to be redesignated to attainment for the 24-hour $PM_{2.5}$ standards (South Coast AQMD 2021a).

AB 617, Community Air Protection Program

Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) requires local air districts to monitor and implement air pollution control strategies that reduce localized air pollution in communities that bear the greatest burdens. In response to AB 617, CARB has established the Community Air Protection Program.

Air districts are required to host workshops to help identify disadvantaged communities disproportionately affected by poor air quality. Once the criteria for identifying the highest priority locations have been identified and the communities have been selected, new community monitoring systems would be installed to track and monitor community-specific air pollution goals. In 2018 CARB prepared an air monitoring plan (Community Air Protection Blueprint), that evaluates the availability and effectiveness of air monitoring technologies and

existing community air monitoring networks. Under AB 617, the Blueprint is required to be updated every five years.

Under AB 617, CARB is also required to prepare a statewide strategy to reduce TACs and criteria pollutants in impacted communities; provide a statewide clearinghouse for best available retrofit control technology; adopt new rules requiring the latest best available retrofit control technology for all criteria pollutants for which an area has not achieved attainment of California AAQS; and provide uniform, statewide reporting of emissions inventories. Air districts are required to adopt a community emissions reduction program to achieve reductions for the communities impacted by air pollution that CARB identifies.

1.1.2 Existing Conditions

CLIMATE/METEOROLOGY

South Coast Air Basin

The project site lies in the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (South Coast AQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The lowest average temperature is reported at 46°F in December, and the highest average temperature is 85°F in August (Weather Spark 2026).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 12.2 inches per year in the vicinity of the area (Weather Spark 2026).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the (South Coast AQMD 2005).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB 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 (South Coast AQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (South Coast AQMD 2005).

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether

they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- ***Unclassified:*** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- ***Attainment:*** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- ***Nonattainment:*** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.
- ***Nonattainment/Transitional:*** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 3, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*.

Table 3 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM_{10}	Serious Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment [1]
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only) [2]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2026a.

1 The SoCAB is pending a resignation request from nonattainment to attainment for the 24-hour federal $PM_{2.5}$ standards. The 2021 $PM_{2.5}$ Redesignation Request and Maintenance Plan demonstrates that the South Coast meets the requirements of the CAA to allow USEPA to redesignate the SoCAB to attainment for the 65 µg/m^3 and 35 µg/m^3 24-hour $PM_{2.5}$ standards. CARB submitted the 2021 $PM_{2.5}$ Redesignation Request to the USEPA as a revision to the California SIP (CARB 2021).

2 In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new 2008 federal AAQS as a result of large industrial emitters. Remaining areas for lead in the SoCAB are unclassified. However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the USEPA revised in 2008. The SIP revision was submitted to the USEPA for approval and was approved in March 2014 (CARB 2014).

EXISTING AMBIENT AIR QUALITY

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the South Coast AQMD. The project site is located within Source Receptor Area (SRA) 16: North Orange County. The air quality monitoring station closest to the proposed project is the Anaheim-Pampas Lane Monitoring Station, which is one of the monitoring stations South Coast AQMD operates and maintains within the SoCAB.[7] Data from this station includes O_3, PM_{10}, $PM_{2.5}$, and NO_2. Table 4, *Ambient Air Quality Monitoring Summary* shows rare violations of the state and federal O_3 standards, state PM_{10} standards, and federal $PM_{2.5}$ standards in the last three years.

Table 4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations [1,2]		
	2022	2023	2024
Ozone (O_3)			
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	1	0	3
State & Federal 8-hour ≥ 0.070 ppm (days exceed threshold)	1	2	3
Max. 1-Hour Conc. (ppm)	0.102	0.089	0.104
Max. 8-Hour Conc. (ppm)	0.076	0.076	0.079
Nitrogen Dioxide (NO_2)			
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0
Max. 1-Hour Conc. (ppb)	0.0530	0.0509	0.0531
Coarse Particulates (PM_{10})			
State 24-Hour > 50 µg/m^3 (days exceed threshold)	1	1	0
Federal 24-Hour > 150 µg/m^3 (days exceed threshold)	0	0	0
Max. 24-Hour Conc. (µg/m^3)	67.0	97.8	118.9
Fine Particulates ($PM_{2.5}$)			
Federal 24-Hour > 35 µg/m^3 (days exceed threshold)	0	1	5
Max. 24-Hour Conc. (µg/m^3)	33.1	45.6	49.7

Source: CARB 2026d.

Notes: ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; * = Data not available

1 Data for O_3, $PM_{2.5}$, PM_{10}, and NO_2 from Anaheim-Pampas Lane Monitoring Station.

2 Most recent data available as of January 2026.

[7] Locations of the SRAs and monitoring stations are shown here: http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf.

MULTIPLE AIR TOXICS EXPOSURE STUDY V

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on existing ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In April 2021, South Coast AQMD released the latest update to the MATES study, MATES V. The first MATES analysis, MATES I, began in 1986 but was limited because of the technology available at the time. Conducted in 1998, MATES II was the first MATES iteration to include a comprehensive monitoring program, an air toxics emissions inventory, and a modeling component. MATES III was conducted in 2004 to 2006, with MATES IV following in 2012 to 2013.

MATES V uses measurements taken during 2018 and 2019, with a comprehensive modeling analysis and emissions inventory based on 2018 data. The previous MATES studies quantified the cancer risks based on the inhalation pathway only. MATES V includes information on the chronic noncancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic noncancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazards Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time.

The MATES V study showed that cancer risk in the SoCAB decreased to 454 in a million from 997 in a million in the MATES IV study. Overall, air toxics cancer risk in the SoCAB decreased by 54 percent since 2012 when MATES IV was conducted. MATES V showed the highest risk locations near the Los Angeles International Airport and the Ports of Long Beach and Los Angeles. Diesel particulate matter continues to be the major contributor to air toxics cancer risk (approximately 72 percent of the total cancer risk). Goods movement and transportation corridors have the highest cancer risk. Transportation sources account for 88 percent of carcinogenic air toxics emissions, and the remainder is from stationary sources, which include large industrial operations such as refineries and power plants as well as smaller businesses such as gas stations and chrome-plating facilities. (South Coast AQMD 2021b).

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can

be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public. The nearest offsite sensitive receptors are the Jesus' Hands Montessori Preschool approximately 130 feet to the west along Craig Avenue and the residences approximately 60 feet south of the project along Franklin Street.

1.1.3 Thresholds of Significance

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in South Coast AQMD's *CEQA Air Quality Handbook* and the significance thresholds on South Coast AQMD's website (South Coast AQMD 1993). CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. South Coast AQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed though an analysis of localized CO impacts and localized significance thresholds (LSTs).

REGIONAL SIGNIFICANCE THRESHOLDS

The South Coast AQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 5, *South Coast AQMD Significance Thresholds*, lists South Coast AQMD's regional significance thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although ultrafine particulates contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from PM. However, the USEPA or CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, South Coast AQMD has not developed thresholds for them.

Table 5 South Coast AQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO_X)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO_X)	150 lbs/day	150 lbs/day
Particulates (PM_{10})	150 lbs/day	150 lbs/day
Particulates ($PM_{2.5}$)	55 lbs/day	55 lbs/day

Source: South Coast AQMD 2023.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk ($PM_{2.5}$, TACs)
- Aggravates respiratory disease (O_3, $PM_{2.5}$)
- Increases bronchitis (O_3, $PM_{2.5}$)
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O_3)
- Reduces resistance to infections and increases fatigue (O_3)
- Reduces lung growth in children ($PM_{2.5}$)
- Contributes to heart disease and heart attacks ($PM_{2.5}$)
- Contributes to premature death (O_3, $PM_{2.5}$)
- Linked to lower birth weight in newborns ($PM_{2.5}$) (South Coast AQMD 2015a)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of $PM_{2.5}$ is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015b).

South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals exposed to elevated concentrations of air pollutants in the SoCAB and has established thresholds that would be protective of these individuals. To achieve the health-based standards established by the USEPA, South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS. Mass emissions thresholds shown in Table 4 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. These thresholds are based on the trigger levels for the federal New Source Review Program, which was created to ensure projects are consistent with attainment of health-based federal AAQS. Regional emissions from a single project do not trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed previously. Projects that do not exceed the South Coast AQMD regional significance thresholds in Table 4 would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

If projects exceed the emissions levels presented in Table 4, then those emissions would cumulatively contribute to the nonattainment status of the air basin and would contribute to elevating health effects associated with these criteria air pollutants. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in

lung function. Health effects associated with particulate matter include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions in Table 4, it is speculative to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment, because mass emissions are not correlated with concentrations of emissions or how many additional individuals in the air basin would be affected by the health effects cited previously.

South Coast AQMD has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health to address the issue raised in *Sierra Club v. County of Fresno* (Friant Ranch, L.P.) (2018) 6 Cal.5th 502, Case No. S21978. South Coast AQMD currently does not have methodologies that would provide the City with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project's mass emissions.[8] Ozone concentrations are dependent on 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 National and California AAQS, and the absence of modeling tools that could provide statistically valid data and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects, it is not possible to link specific health risks to the magnitude of emissions exceeding the significance thresholds. However, if a project in the SoCAB exceeds the regional significance thresholds, the project could contribute to an increase in health effects in the basin until the attainment standards are met in the SoCAB.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is

[8] In April 2019, the Sacramento Metropolitan Air Quality Management District (SMAQMD) published an Interim Recommendation on implementing Sierra Club v. County of Fresno (2018) 6 Cal.5th 502 ("Friant Ranch") in the review and analysis of the proposed project under CEQA in Sacramento County. Consistent with the expert opinions submitted to the court in Friant Ranch by the San Joaquin Valley Air Pollution Control District (SJVAPCD) and South Coast AQMD, the SMAQMD guidance confirms the absence of an acceptable or reliable quantitative methodology that would correlate the expected criteria air pollutant emissions of projects to likely health consequences for people from project-generated criteria air pollutant emissions. The SMAQMD guidance explains that while it is in the process of developing a methodology to assess these impacts, lead agencies should follow the Friant Court's advice to explain in meaningful detail why this analysis is not yet feasible. Since this interim memorandum SMAQMD has provided methodology to address health impacts. However, a similar analysis is not available for projects within the South Coast AQMD region.

typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for the attainment by the South Coast AQMD for busiest intersections in Los Angeles during the peak morning and afternoon periods plan did not predict a violation of CO standards.[9] As identified in the South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (Bay Area Air District 2023).

LOCALIZED SIGNIFICANCE THRESHOLDS

The South Coast AQMD developed LSTs for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at the project site (offsite mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 6, *South Coast AQMD Localized Significance Thresholds*.

[9] The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

Table 6 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO_2 Standard (CAAQS)	0.18 ppm
Annual NO_2 Standard (CAAQS)	0.03 ppm
24-Hour PM_{10} Standard – Construction (South Coast AQMD) [1]	10.4 µg/m^3
24-Hour $PM_{2.5}$ Standard – Construction (South Coast AQMD) [1]	10.4 µg/m^3
24-Hour PM_{10} Standard – Operation (South Coast AQMD) [1]	2.5 µg/m^3
24-Hour $PM_{2.5}$ Standard – Operation (South Coast AQMD) [1]	2.5 µg/m^3

Source: South Coast AQMD 2023.

ppm – parts per million; µg/m^3 – micrograms per cubic meter

1 Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM_{10} and $PM_{2.5}$, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

HEALTH RISK

Whenever a project would require use of chemical compounds that have been identified in South Coast AQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the USEPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the South Coast AQMD. Table 7, *South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The type of land uses that typically generate substantial quantities of criteria air pollutants and TACs from operations include industrial (stationary sources) and warehousing (truck idling) land uses (CARB 2005). As beach uses do not use substantial quantities of TACs, these thresholds are typically applied to new industrial projects only. Additionally, the purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478)).

Table 7 South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases

Source: South Coast AQMD 2023.

Draft Operational Cumulative Health Risk Thresholds

South Coast AQMD initiated a Working Group to identify cumulative health risk thresholds for development projects in order to address community concerns of health risk impacts of new

projects being developed in areas where there is a higher pollution burden. The cumulative health risk threshold methodology first utilizes a screening approach to identify whether projects can qualitatively address cumulative health risk or quantitatively address health risk:

- **Low Cancer Risk Project Types**: Residential, commercial, recreational, educational, and retail.
- **Medium Cancer Risk Project Types**: Truck yards, gas stations, small industrial projects, and linear projects.
- **High Cancer Risk Project Types**. Industrial, major transportation projects (airports, port, railyard, bus/train station), and major planning projects.

For projects with low and medium cancer risks, like the proposed project, a quantitative analysis is not warranted. For projects with the potential to cause high cancer risk impacts, a quantitative is recommended. The initial cumulative threshold is based on MATES V cancer risk percentile, which identifies a gradient of the effects of air pollution on cancer risk in the South Coast AQMD Region. If the project triggers additional criteria, then the initial cumulative threshold should be adjusted as shown in Table 8, *MATES V Adjusted Cumulative Significant Cancer Risk Thresholds*.

Table 8 MATES V Adjusted Cumulative Significant Cancer Risk Thresholds

Project's Background MATES V Cancer Risk[1]	Revised Initial Thresholds based on Cancer Risk
Most Stringent	≥ 1 in 1 million
>90th Percentile	≥ 3 in 1 million
90th Percentile to 50th Percentile	≥ 5 in 1 million
50th Percentile to 30th Percentile	≥ 7 in 1 million
< 30th Percentile	≥ 10 in 1 million

Source: South Coast AQMD 2024.

Notes:

1 Most current MATES V is based on 2018 data.

As stated previously, South Coast AQMD has identified that the initial thresholds in Table 8 should be adjusted if any of the following criteria apply:

- **Criteria #1 – Post-2018 Projects with High Volume Diesel Fueled Trucks**. Post-2018 projects are not accounted for in MATES V. Therefore, if new warehousing projects along the truck route[10] have been constructed, then the initial thresholds will be adjusted to the next, more stringent level (e.g., cumulative threshold will adjust from 10 in one million to 7 in one million).

[10] Truck route is from the project site to major freeway, within certain distance to sensitive receptors, add all diesel-fueled trucks from post-2018 projects.

- **Criteria #2 – Health Sensitive Population**. If the project site is within SB 535 or AB 617 community, then the initial thresholds will be adjusted to the next, more stringent level (e.g., cumulative threshold will adjust from 7 in one million to 5 in one million).

This type of project would be considered low to medium cancer risks; thus, an operational cancer risk analysis for the proposed project would not be warranted.

1.2 GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,[11] carbon (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[12] The major GHG are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.
- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.

[11] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

[12] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.
    - ***Chlorofluorocarbons (CFCs***) are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.
    - ***Perfluorocarbons (PFCs)*** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.
    - ***Sulfur Hexafluoride (SF_6)*** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.
    - ***Hydrochlorofluorocarbons (HCFCs)*** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.
    - ***Hydrofluorocarbons (HFCs)*** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; USEPA 2025c).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 9, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's

Fifth Assessment Report (AR5) GWP values for CH_4, a project that generates 10 MT of CH_4 would be equivalent to 280 MT of CO_2.[13]

Table 9 GHG Emissions and Their Relative Global Warming Potential

GHGs	Fourth Assessment Report (AR4) Global Warming Potential Relative to CO_2 [1]	Fifth Assessment Report (AR5) Global Warming Potential Relative to CO_2 [1]	Sixth Assessment Report (AR6) Global Warming Potential Relative to CO_2 [1]
Carbon Dioxide (CO_2)	1	1	1
Methane[2] (CH_4)	25	28	30
Nitrous Oxide (N_2O)	298	265	273

Source: IPCC 2007, 2013, and 2023.

Notes: The IPCC published updated GWP values in its Sixth Assessment Report (AR6) that reflect latest information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2. However, GWP values identified in AR5 are used by the 2022 Scoping Plan for long-term emissions forecasting.

1 Based on 100-year time horizon of the GWP of the air pollutant compared to CO_2.

2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

1.2.1 GHG Regulatory Setting

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The US Environmental Protection Agency (USEPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The USEPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but allow the USEPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, USEPA was required to issue an endangerment finding (USEPA 2025d). The finding identifies emissions of six key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast AQMD guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory. However, in response to

[13] The global warming potential of a GHG is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

President Trump's "Unleashing American Energy" EO, published on January 20, 2025, the USEPA announced its intention to reconsider regulations and actions that rely on the Endangerment Finding on March 12, 2025 (Holland & Knight 2025a).

The March 12 announcement specifically targets the following which impact GHG emissions:

- Advanced Clean Trucks (ACT) Plan
- Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards
- Multi-Pollutant Emissions Standards for MY 2027 and Later Light- and Medium-Duty Vehicles
- Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles – Phase 3.
- Corporate Average Fuel Economy (CAFE) Standards

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the USEPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO_2 per year are required to submit an annual report. However, under the proposed rule, the USEPA would rescind reporting requirements for a substantial portion of the Greenhouse Gas Reporting Program (GHGRP) (covering most source categories) and would suspend reporting obligations for the remaining sectors (those under Subpart W of the GHGRP) until reporting year 2034 (Holland & Knight 2025b).

Federal Fuel Economy and Fuel Standards

Update to Corporate Average Fuel Economy Standards

The federal government issued new Corporate Average Fuel Economy (CAFE) standards in 2012 for model years 2017 to 2025, which required a fleet average of 54.5 miles per gallon in 2025. On March 30, 2020, the USEPA finalized an updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 to 2026.

On June 7, 2024, NHTSA announced final CAFE standards for passenger cars and light trucks built in model years 2027-2031 and final fuel efficiency standards for heavy-duty pickup trucks and vans built in model years 2030-2035. The final rules establish standards that would require an industry fleet-wide average of approximately 50.4 mpg for passenger cars and light trucks in model year 2031, by increasing fuel economy by 2 percent year over year for passenger cars (model years 2027-2031) and for light trucks (model years 2029-2031). For heavy-duty pickup trucks and vans, the final rule would increase fuel efficiency at a rate of 10 percent per year (model years 2030-2032) and 8 percent per year (model years 2033-2035) (NHTSA 2024).

Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles

In 2024, the USEPA issued a final rule, "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles," that sets new, more protective standards to reduce harmful air pollutant emissions from light-duty and medium-duty vehicles starting with MY 2027 (USEPA 2025e).

2025 Rollback of CAFE and Federal Fuel Standards

While both the new CAFE standards and fuel standard are currently in effect, the Trump Administration, directed the Department of Transportation to rescind and replace all existing CAFE standards and emissions standards on January 29, 2025. This action targeted regulations covering MY 2024 through 2035 for both light-duty and heavy-duty vehicles.

On June 6, 2025, the NHTSA published an interpretive rule that establishes the NHTSA's authority to revise the CAFE standards without consideration of electric vehicles (EVs). California currently has no authority to implement these standards.

On June 11, 2025, the NHTSA published the final rule, "Resetting the Corporate Average Fuel Economy Program." This rule does not immediately change current fuel economy standards; however, the rule clarifies the NHTSA's interpretation of its obligations for CAFE standards stemming from the Energy Policy and Conservation Act of 1975 and the Energy Independence and Security Act of 2007. The rule asserts that some regulations, such as those established under previous presidential administrations, improperly considered electric vehicles (EVs) when identifying the "maximum feasibility" average fuel economy level upon which CAFE standards are developed, thereby establishing a legal foundation for future rollbacks of CAFE standards (NHTSA 2025).

USEPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the Clean Air Act, the USEPA has developed regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the USEPA was directed to develop regulations for existing stationary sources as well. On June 19, 2019, the USEPA issued the final Affordable Clean Energy (ACE) rule, which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence EO. It officially rescinded the Clean Power Plan rule issued during the Obama Administration and set emissions guidelines for states in developing plans to limit CO_2 emissions from coal-fired power plants. The Affordable Clean Energy rule was vacated by the United States Court of Appeals for the District of Columbia Circuit on January 19, 2021. The Biden Administration is assessing options on potential future regulations.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in EO S-03-05 and EO B-30-15, EO B-55-18, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32), and SB 375.

Executive Order S-3-05

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in EO S-03-05. CARB prepared the 2008 Scoping Plan to outline a plan to achieve the GHG emissions reduction targets of AB 32.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, set a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning that not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions should be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill 1279

AB 1279, signed by Governor Newsom in September 2022, codified the carbon neutrality targets of EO B-55-18 for year 2045 and sets a new legislative target for year 2045 of 85 percent

below 1990 levels for anthropogenic GHG emissions. SB 1279 also requires CARB to update the Scoping Plan to address these new targets.

2022 Climate Change Scoping Plan

CARB adopted the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) on December 15, 2022, which lays out a path to achieve carbon neutrality by 2045 or earlier and to reduce the State's anthropogenic GHG emissions (CARB 2022). The Scoping Plan provides updates to the previously adopted 2017 Scoping Plan and addresses the carbon neutrality goals of EO B-55-18 (discussed below) and the ambitious GHG reduction target as directed by AB 1279. Previous Scoping Plans focused on specific GHG reduction targets for our industrial, energy, and transportation sectors—to meet 1990 levels by 2020, and then the more aggressive 40 percent below that for the 2030 target. The 2022 Scoping Plan updates the target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. Carbon neutrality takes it one step further by expanding actions to capture and store carbon including through natural and working lands and mechanical technologies, while drastically reducing anthropogenic sources of carbon pollution at the same time.

The path forward was informed by the recent Sixth Assessment Report (AR6) of the IPCC and the measures would achieve 85 percent below 1990 levels by 2045 in accordance AB 1279. CARB's 2022 Scoping Plan identifies strategies as shown in Table 10, *Priority Strategies for Local Government Climate Action Plans*, that would be most impactful at the local level for ensuring substantial process towards the State's carbon neutrality goals.

Table 10 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
Transportation Electrification	Convert local government fleets to zero-emission vehicles (ZEV) and provide EV charging at public sites.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).
VMT Reduction	Reduce or eliminate minimum parking standards.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements.
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking
	Implement parking pricing or transportation demand management pricing strategies.

Priority Area	Priority Strategies
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing allowable density of the neighborhood).
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements)
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers).
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances.
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing).
Building Decarbonization (cont.)	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings).

Source: CARB 2022.

Based on Appendix D of the 2022 CARB Climate Change Scoping Plan, for residential and mixed-use development projects, CARB recommends first demonstrating that these land use development projects are aligned with State climate goals based on the attributes of land use development that reduce operational GHG emissions while simultaneously advancing fair housing. Attributes that accommodate growth in a manner consistent with the GHG and equity goals of SB 32 have all the following attributes:

- Transportation Electrification
  - Provide EV charging infrastructure that, at a minimum, meets the most ambitious voluntary standards in the California Green Building Standards Code at the time of project approval.
- VMT Reduction
  - Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).
  - Does not result in the loss or conversion of the State's natural and working lands;

  - Consists of transit-supportive densities (minimum of 20 residential dwelling units/acre), or is in proximity to existing transit stops (within a half mile), or satisfies more detailed and stringent criteria specified in the region's Sustainable Communities Strategy (SCS);
  - Reduces parking requirements by:
    - Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or
    - Providing residential parking supply at a ratio of <1 parking space per dwelling unit; or
    - For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.
  - At least 20 percent of the units are affordable to lower-income residents;
  - Result in no net loss of existing affordable units.

- Building Decarbonization
  - Use all electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking (CARB 2022).

If the first approach to demonstrating consistency is not applicable (such as in the case of this school modernization project), the second approach to project-level alignment with state climate goals is to achieve net zero GHG emissions. The third approach to demonstrating project-level alignment with state climate goals is to align with GHG thresholds of significance, which many local air quality management (AQMDs) and air pollution control districts (APCDs) have developed or adopted (CARB 2022).

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPO). The SCAG is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Update to SB 375 Targets

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology, and then released another update in February 2018, which became effective in October 2018 (CARB 2018). All sustainable community's strategies (SCS) adopted after October 1, 2018, are subject to these new targets. The SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks compared to 2005. This excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies such as statewide road user pricing. The proposed targets call for greater per-capita GHG emission reductions from SB 375 than are currently in place, which for 2035 translates into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs. CARB staff began the target update process in 2024 with a public workshop and plans to conclude it in 2026 with Board approval of the new targets (CARB 2026e).

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan (RTP/SCS). For the SCAG region, the 2024-2050 RTP/SCS, Connect SoCal, was adopted on April 4, 2024, and is an update to the 2020-2045 RTP/SCS. In general, the RTP/SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land use strategies in development of the SCAG region through the horizon year 2050 (SCAG 2024). Connect SoCal forecasts that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. It also forecasts that implementation of the plan will reduce VMT per capita in year 2050 by 6.3 percent compared to baseline conditions for that year. Connect SoCal includes a "Core Vision" that centers on maintaining and better managing the transportation network for moving people and goods, while expanding mobility choices by locating housing, jobs, and transit closer together; and increasing investments in transit and complete streets (SCAG 2024).

Transportation Sector Specific Regulations

Advanced Clean Trucks

In March 2021, CARB approved the Advanced Clean Trucks (ACT) regulation to accelerate the transition to zero-emission Class 2b and Class 8 medium- and heavy-duty trucks through

manufacturer sales requirements. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- ZE Truck Sales: Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell ZE trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, ZE truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- Company and Fleet Reporting: Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available ZE trucks and place them in service where suitable to meet their needs.

The ACT regulation was granted a separate waiver in 2023 by the Biden administration. On May 22, 2025, the U.S. Senate voted to revoke the waiver granted by the Biden administration for California's ACT rule through House Joint (H.J.) Resolution 87. On June 12, 2025, President Trump formally nullified California's ACT rule. California currently has no authority to implement ACT.

Advanced Clean Fleets

CARB adopted the Advanced Clean Fleets (ACF) regulation in April 2023, requiring the use of ZEVs for targeted fleets and that manufacturers only produce ZEV trucks starting in 2036. The ACF regulation was adopted to complement the recently adopted ACT regulation to help advance the introduction of ZE technology into California's trucks and bus fleets. By 2050, the ACF regulation is expected to introduce 1,690,000 ZEVs into the California fleet and result in $26.5 billion in statewide health benefits from improved air quality. This regulation will help contribute to the goals set by EO N-79-20 (described further below) and will help achieve emission reductions outlined in the State Implementation Plan, SB 350, AB 32, SB 32, and AB 32. The regulation has four components including a manufacturer sales mandate, drayage fleets requirements, high priority and federal fleets phase-in, and State and local agency procurement requirements.

On January 13, 2025, CARB withdrew their requests for the federal CAA waiver from the US EPA needed to support the ACF regulation. In addition, on September 25, 2025, CARB repealed the ACF drayage truck requirements (13 CCR § 2014) and the high priority and federal fleet requirements (13 CCR § 2015 through 2015.6). California currently has no authority to implement ACF.

Omnibus Regulation

CARB adopted the Heavy-Duty Low NO_X Omnibus Regulation rule in September 2021, and amended in December 2023, to reduce nitrogen oxide (NO_X) and particulate matter (PM) emissions from new medium- and heavy-duty engines and vehicles beginning in 2024 model year (MY). The lower NO_X standards for 2024 through 2026 MY engines represent a 75 percent reduction of the 2010 MY standard and the lower PM standards represents a 50 percent reduction compared to the 2010 MY standard. The regulation was amended in 2023 to provide engine manufacturers with additional flexibility, and to prevent product availability issues for the 2024 through 2026 MY period.

On May 22, 2025, the U.S. Senate voted to disapprove the USEPA's waiver authorizing California's Heavy-Duty Low NO_X regulation through House Joint (H.J.) Resolution 89. The resolution was signed into law on June 12, 2025, formally nullifying the USEPA waiver under the Congressional Review Act. As a result, California currently has no authority to implement or enforce the Heavy-Duty Low NO_X rule.

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the USEPA. In 2012, the USEPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles. (See also the discussion on the update to the Corporate Average Fuel Economy standards at the beginning of this Section 5.5.2 under "Federal.") In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZE vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025 new automobiles will emit 34 percent less GHG emissions and 75 percent less smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in CO_2e gram per unit of fuel energy sold in California. The LCFS required a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and uses market-based mechanisms to allow these providers to choose

how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate ZE vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directed the number of ZE vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are ZE by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions to 80 percent below 1990 levels.

Executive Order N-79-20

On September 23, 2020, Governor Newsom signed Executive Order N-79-20, whose goal is that 100 percent of in-state sales of new passenger cars and trucks will be ZE by 2035. Additionally, the fleet goals for trucks are that 100 percent of drayage trucks are ZE by 2035, and 100 percent of medium- and heavy-duty vehicles in the state are ZE by 2045, where feasible. The Executive Order's goal for the State is to transition to 100 percent ZE off-road vehicles and equipment by 2035, where feasible.

Renewables Portfolio: Carbon Neutrality Regulations

Senate Bills 1078, 107, and X1-2 and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewables portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08, signed in November 2008, expanded the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a

new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100. Under SB 100, the RPS for public-owned facilities and retail sellers consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also established a new RPS requirement of 50 percent by 2026. Furthermore, the bill establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Senate Bill 1020

SB 1020 was signed into law on September 16, 2022. It requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent by 2040. Additionally, SB 1020 requires all State agencies to procure 100 percent of electricity from renewable energy and zero-carbon resources by 2035.

Energy Efficiency Regulations

California Building Energy Code: Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2024 (California Code of Regulations [CCR] Title 24, Part 6). Title 24 Part 6 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

In 2024, the CEC adopted the 2025 Building Energy Efficiency Standards, which were subsequently approved by the California Building Standards Commission. The 2025 standards become effective and replace the existing 2022 standards on January 1, 2026. The 2025 standards would require mixed-fuel single-family homes to be electric-ready to accommodate replacement of gas appliances with electric appliances. In addition, the new standards also include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention

centers.[14] The Building Energy and Efficiency Standards and CALGreen undergo a triennial update with a goal to achieve zero net energy for new buildings by 2030.

California Building Code: Green Building Standards (CALGreen)

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[15] The mandatory provisions of CALGreen became effective January 1, 2011, and were most recently updated in 2024 (2025 CALGreen update). The 2025 CALGreen update becomes effective on January 1, 2026, and provides updates to the residential and non-residential voluntary measures.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Diversion Regulations

AB 939: Integrated Waste Management Act of 1989

California's Integrated Waste Management Act of 1989 (AB 939, Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

[14] California Energy Commission, 2021, Amendments to the Building Energy Efficiency Standards (2022 Energy Code) Draft Environmental Report. CEC-400-2021-077-D.
[15] The green building standards became mandatory in the 2010 edition of the code.

AB 341

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. Section 5.408 of CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

AB 1327

The California Solid Waste Reuse and Recycling Access Act (AB 1327, Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

AB 1826

In October of 2014, Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses and multifamily residential dwellings with five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed with food waste.

Water Efficiency Regulations

SBX7-7

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed “SBX7-7.” SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 required urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

AB 1881: Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or an equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Short-Lived Climate Pollutant Reduction Strategy

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH_4. Black carbon is the light-absorbing component of fine particulate matter produced during the incomplete combustion of fuels. SB 1383 required the state board, no later than January 1, 2018, to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The bill also established targets for reducing organic waste in landfills. On March 14, 2017, CARB adopted the Short-Lived Climate Pollutant Reduction Strategy, which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s, despite the tripling of diesel fuel use (CARB 2017). In-use on-road rules were expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. South Coast AQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these charbroilers by over 80 percent (CARB 2017). Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the South Coast Air Basin.

CALIFORNIA'S GREENHOUSE GAS SOURCES AND RELATIVE CONTRIBUTION

In 2025, the statewide GHG emissions inventory was updated for 2000 to 2023 emissions using the GWPs in IPCC's AR4 and reported that California produced 360.4 $MMTCO_2e$ GHG emissions in 2023 (3.0 percent lower than 2022 levels). Since peak levels in 2004, California's GHG emissions have generally followed a decreasing trend. By 2014, statewide GHG emissions dropped below the 2020 GHG Limit (AB 32 target for year 2020) and have remained below the Limit since that time. Additionally, the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross state product (GSP)) is declining (CARB 2025).

California's transportation sector remains the largest source of GHG emissions, producing 37.1 percent of the state's total emissions. Industrial sector emissions made up 18.6 percent, and electric power generation made up 15.9 percent of the state's emissions inventory. Other major sectors of GHG emissions include residential and commercial (12.0 percent), agriculture and forestry (8.1 percent), high GWP (5.9 percent), and recycling and waste (2.4 percent).

Emissions from transportation sector have generally decreased since their peak in 2002, but this sector has experienced periods of growth and decline. The decrease in 2023 was primarily due to reductions from on-road sources and decrease in the amount of fuel used. Electricity emissions also have decreased since the early 2000s due to the deployment of renewable and less carbon-intensive resources, leading to reduced dependence on fossil fuel electricity generation. Emissions from the industrial sector decreased from 2022, largely due to the continued downward trend in oil and gas production (CARB 2025).

1.2.2 Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[16]

SOUTH COAST AQMD WORKING GROUP

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). The South Coast AQMD Working Group (Meeting No. 15) identified a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010):

[16] The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, South Coast AQMD requires an assessment of GHG emissions. The South Coast AQMD Working Group identified a screening-level threshold of 3,000 $MTCO_2e$ annually for all land use types or the following land-use-specific thresholds: 1,400 $MTCO_2e$ for commercial projects, 3,500 $MTCO_2e$ for residential projects, or 3,000 $MTCO_2e$ for mixed-use projects. These bright-line thresholds are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions:
- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

  The South Coast AQMD Working Group has identified an efficiency target for projects that exceed the screening threshold of 4.8 $MTCO_2e$ per year per service population ($MTCO_2e$/year/SP) for project-level analyses and 6.6 $MTCO_2e$/year/SP for plan level projects (e.g., program-level projects such as general plans) for the year 2020.[17] The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.

The bright-line screening-level criterion of 3,000 $MTCO_2e$/yr is used as the significance threshold for this project. Therefore, if the project operation-phase emissions exceed the 3,000 $MTCO_2e$/yr threshold, GHG emissions would be considered potentially significant in the absence of mitigation measures.

[17] It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

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Assumptions Worksheet

CalEEMod Inputs- 5600 Beach Boulevard Residential Development Project, Construction

Name: 5600 Beach Boulevard Residential Development Project
Project Number: CBP-06
Project Location: 5600 Beach Boulevard, Buena Park, Orange County
County: South Coast
Climate Zone: 8
Land Use Setting: Urban
Gas Utility Company: Southern California Gas
Electric Utility Company: Southern California Edison
Air Basin: South Coast Air Basin
Air District: South Coast AQMD
SRA: 16 - North Orange County

Project Site Acreage	13.76
Disturbed Site Acreage	13.76

Building Demolition	*SQFT*	*Amount of Debris (Tons)*
Commercial/Industrial Buildings	370,031	17,021
Asphalt Demolition	275,136	4,076

Project Components	*SQFT*	*Building Footprint per Building*	*Building Footprint*	*Acres*	*Stories*	*Units*	*Quantity (Building)*
New Construction							
Building A - Affordable Senior Apartments	42,700	10,900	10,900	0.25	4	50	1
Townhomes B - Building A	28,794	3,179	9,537	0.22	3	12	3
Townhomes B - Building B	104,562	3,758	33,822	0.78	3	45	9
Townhomes B - Building C	36,189	3,978	11,934	0.27	3	15	3
Townhomes B - Building D	97,902	4,526	31,682	0.73	3	42	7
Townhomes C - Duets	287,506	1,689	97,962	2.25	3	116	58
Townhomes C - Duet Single	4,140	872	872	0.02	3	1	1
Pool Building	437	437	437	0.01		1	1
Sub Total	*602,230*	*29,339*	*197,146*	*4.53*		*282*	*83*
Site Improvements	***SQFT***	***Building Footprint***		***Acres***	***Parking Spaces***	***Notes***	
Open Space (private balcony)	5,973	-		0.14	-		
Open Space (ground floor)	3,574	-		0.08	-		
Affordable Appartments Open Space	16,660	-		0.38	-		
North Neighborhood Paseo	23,297	-		0.53	-		
South Neighborhood Paseo	59,424	-		1.36	-		
Duet Neighborhood Paseo	41,600	-		0.96	-		
Rear Paseo	17,455	-		0.40	-		
Open Space 1	2,432	-		0.06	-		
Open Space 2	978	-		0.02	-		
Pool Courtyard	9,531	-		0.22	-		
Dog Relief Station	1,021	-		0.02	-		
Open Lawn	2,054	-		0.05	-		
Garage Parking Spaces	101,871	-		2.34	462	231 EV Capable Spaces, 1.64/unit	
Parking garage for townhomes	50,274	-		1.15	-	Calculated proportionally based on number of townhome/duet units	
Parking garage for duets	51,597	-		1.18	-	Calculated proportionally based on number of townhome/duet units	
On-site/Guest Spaces	19,260	-		0.44	105	0.37/unit	
Spaces for Affordable Apartments	5,663	-		0.13	-	Based on 0.76 acreage site for affordable apartments	
Spaces for Townhomes and Duets	13,504	-		0.31	-	Based on 13.0 acreage site for duet and townhomes	
Roadways[1]	97,110	-		2.23	-		

Notes:

[1] Including remaining acreage for new roadways onsite.

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Phase	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet	Landscaped Area
Residential (Affordable Senior Apartments)	Apartments Mid Rise	4.1	50	Dwelling Unit	0.76	42,700	16,660
Residential (Townhomes)	Condo/Townhouse High Rise	4.2	114	Dwelling Unit	5.13	317,721	86,131
Residential (Duets)	Condo/Townhouse High Rise	4.2	117	Dwelling Unit	5.10	349,216	65,704
Recreational	Health Club	4.2	0.44	1000 SQFT	0.01	437	NA
Parking	Other Non-Asphalt Surfaces	4.2	9.53	1000 SQFT	0.22	9,531	NA
Parking	Other Asphalt Surfaces	4.2	110.61	1000 SQFT	2.54	110,613	NA
					13.76		

Notes:

[1] Affordable Senior Apartments land use accounts for landscaped area for Affordable Apartments Open Space. Lot acreage accounts for a portion of on-site/guest spaces.

[2] Townhomes land use accounts for landscaped area for North and South Neighborhood Paseo, Open Space 1, and Open Space 2.

[3] Duets land use accounts acounts for open space (private balcony) and landscaped area for Duet Neighborhood Paseo, Rear Paseo, Dog Relief Station, and Open Lawn.

[4] Health Club land use represents Pool Building.

[5] Other Non-Asphalt Surfaces land use represents Pool Courtyard.

[6] Other Asphalt Surfaces land use represents a portion of on-site/guest spaces and new roadways.

Demolition

Component	Amount to be Demolished[1]	Haul Truck Capacity (Tons)[2]	Haul Distance (miles)[2]	Total Trip Ends	Duration (days)	Trip Ends Per Day
Building (Tons)	17,021	8	20	4,256	86	49
Asphalt (Tons)	4,076	8	20	1,020	86	12
Total	21,098					61

Notes:

[1] Based on Applicant information, conservatively assume all demolition would be hauled offsite.

[2] CalEEMod default used.

Soil Haul

Construction Activities	Volume (CY)[1]	Haul Truck Capacity (CY)[2]	Haul Distance (miles)[2]	Total Trip Ends	Duration (days)	Trip Ends per Day
P2 Rough Grading Import	36,600	16	20	4,575	88	52

Notes:

[1] Based on Applicant information.

[2] CalEEMod default used.

Architectural Coating

	Percent Painted
Interior Painted:	100%
Exterior Painted:	100%

South Coast AQMD Rule 1113

Interior Paint VOC content:	50	grams per liter
Exterior Paint VOC content:	50	grams per liter
Parking Paint VOC content:	100	grams per liter

Structures	Land Use Square Feet	CalEEMod Factor[2]	Total Paintable Surface Area	Paintable Interior Area[1]	Paintable Exterior Area[1]
Non-Residential Structures					
Residential (Affordable Senior Apartments)	42,700	2.7	115,290	86,468	28,823
Residential (Townhomes)	317,721	2.7	857,847	643,385	214,462
Residential (Duets)	349,216	2.7	942,883	707,162	235,721
Health Club	437	2.0	874	656	219
				1,437,670	**479,223**
Parking					
Parking (Affordable Senior Apartments)	5,663	6%	340	-	340
Other Non-Asphalt Surfaces	9,531	6%	572	-	572
Other Asphalt Surfaces	110,613	6%	6,637	-	6,637
					7,548

Notes:

[1] CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.

[2] CalEEMod assumes the total surface for painting equals 2.7 times the floor square footage for residential uses and 2 times the floor square footage for nonresidential uses as defined by user.

[3] Assumes that all parking and non-asphalt surfaces will be striped. CalEEMod methodology assumes 6% of surface area is striped.

Construction Mitigation

SCAQMD Rule 403

Water Unpaved Roads	Frequency:	2	per day
	PM10:	55	% Reduction
	PM25:	55	% Reduction
Water Exposed Area	Frequency:	2	per day
	PM10:	61	% Reduction
	PM25:	61	% Reduction
Unpaved Roads	Vehicle Speed:	25	mph

SCAQMD Rule 1186

	Clean Paved Road	9	% PM Reduction

Building Demolition Haul Trip Calculation:

Source: CalEEMod User's Guide Version 2022, Appendix C

Conversion factors

0.046	ton/SF	Building Debris
2.0	CY/ton	Building Debris
1.2641662	tons/cy	Soil
20	tons	Truck Capacity in tons
16	CY	Truck Capacity in CY
0.8	CY/ton	Soil

Building	BSF Demo	Tons/SF	Tons	CY of Building Materials	Haul Truck (CY)	Haul Truck (Ton)	Round Trips	Total Trip Ends
P1 Building Demolition	370,031	0.046	17,021	34,043	16	20	2,128	4,256

Pavement Volume to Weight Conversion

Component	Total SF of Area[1]	Assumed Thickness (foot)[2]	Debris Volume (cu. ft)	Weight of Crushed Asphalt (lbs/cf)[3]	AC Mass (lbs)	AC Mass (tons)
P1 Asphalt Demolition	275,136	0.333	91,712	89	8,152,178	4076.09
Total	275,136					4,076

[1] Based on information provided by District.

[2] Gibbons, Jim. 1999. Pavements and Surface Materials. Nonpoint Education for Municipal Officials, Technical Paper Number 8. University of Connecticut Cooperative Extension System. https://www.uni-groupusa.org/PDF/NEMO_tech_8.pdf

[3] CalRecycle. 2019. Solid Waste Cleanup Program Weights and Volumes for Project Estimates. https://www.delmar.ca.us/DocumentCenter/View/5668/CalRecycle-Conversion-Table

Construction Activities and Schedule Assumptions:

* based on schedule provided by Applicant

Master Construction Schedule (CalEEMod)					
Phase	**Construction Activities**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**	**Notes:**
1	P1 Demolition	2/1/2027	5/31/2027	86	Phase 1: Demolition of the existing Amway Nutrilite Center Campus: February 2027 to May 2027
1	P1 Demolition Debris Onsite Reprocessing	2/1/2027	5/31/2027	86	
1	P1 Site Preparation	2/1/2027	5/31/2027	86	
2	P2 Rough Grading	6/1/2027	9/30/2027	88	Phase 2: Grading from June 2027 to September 2027
3	P3 Fine Grading	10/1/2027	4/30/2028	151	Phase 3: Land Development (wet utilities, storm drain, streets, dry utilities) from October 2027 to April 2028
3	P3 Utility Trenching	10/1/2027	4/30/2028	151	
4.1	P4.1 Building Construction (Senior Affordable Apartments)	10/1/2027	9/30/2029	521	Phase 4.1: Construction of senior affordable apartments from October 2027 to September 2029
4.1	P4.1 Paving	8/24/2029	9/30/2029	26	
4.1	P4.1 Architectural Coating	8/24/2029	9/30/2029	26	
4.1	P4.1 Finishing and Landscaping	8/24/2029	9/30/2029	26	
4.2	P4.2 Building Construction (Townhomes and Duet Homes)	5/1/2028	10/31/2030	654	Phase 4.2: Construction of duet homes and townhomes from May 2028 to October 2030
4.2	P4.2 Paving	9/3/2030	10/31/2030	43	
4.2	P4.2 Architectural Coating	9/3/2030	10/31/2030	43	
4.2	P4.2 Finishing and Landscaping	9/3/2030	10/31/2030	43	

Notes:

[1] P4.1 and P4.2 Paving, architectural coating, and finishing/landscaping durations based on overall Phase 4.1 and 4.2 construction durations (refer to Normalized Schedule).

Overlapping Construction Schedule (CalEEMod)				
Phase	**Construction Activities**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
1	P1 Demolition, P1 Demolition Debris Onsite Reprocessing, and Site Preparation	2/1/2027	5/31/2027	86
2	P2 Rough Grading	6/1/2027	9/30/2027	88
3 and 4.1	P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction	10/1/2027	4/30/2028	151
4.1 and 4.2	P4.1 Building Construction and P4.2 Building Construction	5/1/2028	8/23/2029	344
4.1 and 4.2	P4.1 Building Construction, P4.2 Building Construction, P4.1 Paving, P4.1 Architectural Coating, and P4.1 Finishing and Landscaping	8/24/2029	9/30/2029	26
4.2	P4.2 Building Construction	10/1/2029	9/2/2030	241
4.2	P4.2 Building Construction, P4.2 Paving, P4.2 Architectural Coating, and P4.2 Finishing and Landscaping	9/3/2030	10/31/2030	43

Overlapping Construction Schedule (Construction HRA)				
Phase	**Construction Activities**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
1	P1 Demolition, P1 Demolition Debris Onsite Reprocessing, and Site Preparation	2/1/2027	5/31/2027	86
2	P2 Rough Grading	6/1/2027	9/30/2027	88
3 and 4.1	P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction	10/1/2027	12/31/2027	66
3 and 4.1	P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction	1/1/2028	4/30/2028	85
4.1 and 4.2	P4.1 Building Construction and P4.2 Building Construction	5/1/2028	12/31/2028	175
4.1 and 4.2	P4.1 Building Construction and P4.2 Building Construction	1/1/2029	8/23/2029	169
4.1 and 4.2	P4.1 Building Construction, P4.2 Building Construction, P4.1 Paving, P4.1 Architectural Coating, and P4.1 Finishing and Landscaping	8/24/2029	9/30/2029	26
4.2	P4.2 Building Construction	10/1/2029	12/31/2029	66
4.2	P4.2 Building Construction	1/1/2030	9/2/2030	175
4.2	P4.2 Building Construction, P4.2 Paving, P4.2 Architectural Coating, and P4.2 Finishing and Landscaping	9/3/2030	10/31/2030	43

Normalized Schedule

CalEEMod Default Construction Schedule: P4.1 Senior Affordable Apartments				
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
Demolition	Demolition	10/1/2027	10/15/2027	11
Site Preparation	Site Preparation	10/16/2027	10/17/2027	1
Grading	Grading	10/18/2027	10/20/2027	3
Building Construction	Building Construction	10/21/2027	3/9/2028	101
Paving	Paving	3/3/2028	3/9/2028	5
Architectural Coating	Architectural Coating	3/3/2028	3/9/2028	5
			Total Days	**160**

Notes:

[1] Based on 0.76 acreage site. Conservatively assume building construction, paving, and architectural coating activities overlap.

Normalization Calculations				
CalEEMod Defaults Construction Duration			**Assumed Construction Duration**	
140	days of construction		10/1/2027	9/30/2029
0.38	years of construction		730	days
4.60	months of construction		24.00	months
		Norm Factor:	5.21	

CalEEMod Modified Construction Schedule: P4.1 Senior Affordable Apartments				
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
Building Construction	Building Construction	10/1/2027	9/30/2029	521
Paving	Paving	8/24/2029	9/30/2029	26
Architectural Coating	Architectural Coating	8/24/2029	9/30/2029	26

CalEEMod Default Construction Schedule: P4.2 Townhomes and Duet Homes				
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
Demolition	Demolition	5/1/2028	5/29/2028	21
Site Preparation	Site Preparation	5/30/2028	6/13/2028	1
Grading	Grading	6/14/2028	7/26/2028	31
Building Construction	Building Construction	7/27/2028	9/20/2029	301
Paving	Paving	8/24/2029	9/20/2029	20
Architectural Coating	Architectural Coating	8/24/2029	9/20/2029	20
			Total Days	**507**

Notes:

[1] Based on 13.0 acreage site. Conservatively assume building construction, paving, and architectural coating activities overlap.

Normalization Calculations				
CalEEMod Defaults Construction Duration			**Assumed Construction Duration**	
420	days of construction		5/1/2028	10/31/2030
1.15	years of construction		913	days
13.81	months of construction		30.02	months
		Norm Factor:	2.17	

CalEEMod Default Construction Schedule: P4.2 Townhomes and Duet Homes				
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
Building Construction	Building Construction	5/1/2028	10/31/2030	654
Paving	Paving	9/3/2030	10/31/2030	43
Architectural Coating	Architectural Coating	9/3/2030	10/31/2030	43

CalEEMod Construction Off-Road Equipment Inputs:

Source: CalEEMod defualts (except where noted).

Construction Equipment Details					
Provided Equipment	**# of Equipment**	**hr/day**	**Engine Tier**	**Mitigated Engine Tier[4]**	**total trips per day**
P1 Demolition					
Concrete/Industrial Saws	1	8	Average	Tier 4 Final	
Excavators	3	8	Average	Tier 4 Final	
Worker Trips					10
Vendor Trips					2
Hauling Trips					61
P1 Demolition Debris Onsite Reprocessing					
Crushing/Proc. Equipment	1	8	Average	Average	
Worker Trips					3
Vendor Trips					0
Hauling Trips					0

P1 Site Preparation						
Rubber Tired Dozers	3	8		Average	Tier 4 Final	
Tractors/Loaders/Backhoes	4	8		Average	Tier 4 Final	
Worker Trips						18
Vendor Trips						1
Hauling Trips						0
Water Trucks (added to Vendor Trips)		Acres Disturbed:	3.50			18
		Onsite Travel (mi/day)	2.89			
Modified Vendor Trips						19
P2 Rough Grading						
Excavators	2	8		Average	Tier 4 Final	
Graders	1	8		Average	Tier 4 Final	
Rubber Tired Dozers	1	8		Average	Tier 4 Final	
Scrapers	2	8		Average	Tier 4 Final	
Tractors/Loaders/Backhoes	2	8		Average	Tier 4 Final	
Worker Trips						20
Vendor Trips						3
Hauling Trips						52
Water Trucks (added to Vendor Trips)		Acres Disturbed:	4.00			20
		Onsite Travel (mi/day)	3.30			
Modified Vendor Trips						23
P3 Fine Grading						
Excavators	2	8		Average	Tier 4 Final	
Graders	1	8		Average	Tier 4 Final	
Rubber Tired Dozers	1	8		Average	Tier 4 Final	
Scrapers	2	8		Average	Tier 4 Final	
Tractors/Loaders/Backhoes	2	8		Average	Tier 4 Final	
Worker Trips						20
Vendor Trips						3
Hauling Trips						0
Water Trucks (added to Vendor Trips)		Acres Disturbed:	4.00			20
		Onsite Travel (mi/day)	3.30			
Modified Vendor Trips						23
P3 Utility Trenching						
Skid Steer Loaders	1	8		Average	Tier 4 Final	
Worker Trips						3
Vendor Trips						0
Hauling Trips						0

P4.1 Building Construction (Senior Affordable Apartments)						
	Cranes	1	4	Average	Tier 4 Final	
	Forklifts	2	6	Average	Tier 4 Final	
	Tractors/Loaders/Backhoes	2	8	Average	Tier 4 Final	
	Worker Trips					36
	Vendor Trips					5
	Hauling Trips					0
P4.1 Paving						
	Cement and Mortar Mixers	4	6	Average	Average	
	Pavers	1	7	Average	Tier 4 Final	
	Rollers	1	7	Average	Tier 4 Final	
	Worker Trips					15
	Vendor Trips					2
	Hauling Trips					0
P4.1 Architectural Coating						
	Air Compressors	1	6	Average	Tier 4 Final	
	Worker Trips					7
	Vendor Trips					0
	Hauling Trips					0
P4.1 Finishing and Landscaping						
	Skid Steer Loaders	1	8	Average	Tier 4 Final	
	Worker Trips					3
	Vendor Trips					0
	Hauling Trips					0
P4.2 Building Construction (Townhomes and Duet Homes)						
	Cranes	1	7	Average	Tier 4 Final	
	Forklifts	3	8	Average	Tier 4 Final	
	Generator Sets	1	8	Average	Average	
	Tractors/Loaders/Backhoes	3	7	Average	Tier 4 Final	
	Welders	1	8	Average	Tier 4 Final	
	Worker Trips					167
	Vendor Trips					25
	Hauling Trips					0
P4.2 Paving						
	Pavers	2	8	Average	Tier 4 Final	
	Paving Equipment	2	8	Average	Tier 4 Final	
	Rollers	2	8	Average	Tier 4 Final	
	Worker Trips					15
	Vendor Trips					2
	Hauling Trips					0
P4.2 Architectural Coating						
	Air Compressors	1	6	Average	Tier 4 Final	
	Worker Trips					33
	Vendor Trips					0
	Hauling Trips					0
P4.2 Finishing and Landscaping						

Skid Steer Loaders	1	8	Average	Tier 4 Final	
Worker Trips					3
Vendor Trips					0
Hauling Trips					0

Notes:

[1] Phase 1-3 equipment mix based on acreage of 13.76 acres, assume shared equipment, demolition debris onsite reprocessing and utility trenching based on previous residential development projects.

[2] Phase 4.1 equipment mix based on acreage of 0.76 acres, does not assume shared equipment with other development phases, finishing and landscaping based on previous residential development projects.

[3] Phase 4.2 equipment mix based on acreage of 13.0 acres, does not assume shared equipment with other development phases, finishing and landscaping based on previous residential development projects.

[4] Tier 4 Final engines for equipment with 25 hp or greater per Mitigation Measure AQ-2.

Water Truck Vendor Trip Calculation

Amount of Water (gal/acre/day)[1]	Water Truck Capacity (gallons)[2]
10,000	4,000

Notes:

[1] Based on data provided in Guidance for Application for Dust Control Permit

Maricopa County Air Quality Department. 2005, June. Guidance for Application of Dust Control Permit. https://www.epa.gov/sites/default/files/2019-04/documents/mr_guidanceforapplicationfordustcontrolpermit.pdf)

[2] Based on standard water truck capacity:
McLellan Industries. 2026, January (access). Water Trucks. https://www.mclellanindustries.com/trucks/water-trucks/

[3] Assumes that dozers, tractors/loaders/backhoes, and graders can disturb 0.50 acres per day and scrapers can disturb 1 acre per day.

CalEEMod Inputs- 5600 Beach Boulevard Residential Development Project, Proposed, Operation

Name: 5600 Beach Boulevard Residential Development Project
Project Number: CBP-06
Project Location: 5600 Beach Boulevard, Buena Park, Orange County
County: South Coast
Climate Zone: 8
Land Use Setting: Urban
Gas Utility Company: Southern California Gas
Electric Utility Company: Southern California Edison
Air Basin: South Coast Air Basin
Air District: South Coast AQMD
SRA: 16 - North Orange County

Project Site Acreage	13.76
Disturbed Site Acreage	13.76

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Phase	Unit	Size Metric	Lot Acreage	Land Use Square Feet	Landscaped Area
Residential (Affordable Senior Apartments)	Apartments Mid Rise	4.1	50	Dwelling Unit	0.76	42,700	16,660
Residential (Townhomes)	Condo/Townhouse High Rise	4.2	114	Dwelling Unit	5.13	317,721	86,131
Residential (Duets)	Condo/Townhouse High Rise	4.2	117	Dwelling Unit	5.10	349,216	65,704
Recreational	Health Club	4.2	0.44	1000 SQFT	0.01	437	NA
Parking	Other Non-Asphalt Surfaces		9.53	1000 SQFT	0.22	9,531	NA
Parking	Other Asphalt Surfaces		110.61	1000 SQFT	2.54	110,613	NA
					13.76		

Trips (Average Daily)[1]

Land Use Type	Average Daily Trips	CalEEMod Trip Rate	Saturday Trips	CalEEMod Trip Rate	Sunday Trips	CalEEMod Trip Rate
Residential (Affordable Senior Apartments)	241	**4.82**	241	**4.82**	241	**4.82**
Residential (Townhomes)	708	**6.21**	708	**6.21**	708	**6.21**
Residential (Duets)	769	**6.57**	769	**6.57**	769	**6.57**
Sub total	**1,718**					

Source: LLG, 2025. Table 5, Project Trip Generation Estimates.

Notes

[1] Trips calculated based on ITE Trip Gen 12th Edition daily trip rates for Single-Family Attached Housing, Multifamily Housing Low Rise, and Affordable Housing Income Limits.

Water Use (CalEEMod Defaults)

	Indoor (gpy)	Outdoor (gpy)
Residential (Affordable Senior Apartments)	1,876,283	263,902
Residential (Townhomes)	4,277,924	1,364,354
Residential (Duets)	4,390,501	1,040,781
Health Club	26,023	0

Notes

[1] Assumes 100% aerobic treatment.

Solid Waste (CalEEMod Defaults)

Land Use	Total Solid Waste (tons/yr)
Residential (Affordable Senior Apartments)	36.97
Residential (Townhomes)	84.37
Residential (Duets)	86.60
Health Club	2.51

Fireplaces (no fireplaces and 4 charcoal BBQs)

Architectural Coating (see Construction Land Use Tab)

CalEEMod Energy Use (CalEEMod Defaults)

Land Use Subtype	Total Annual Electricity Consumption (kWh/year)	Total Annual Natural Gas Consumption (kBTU/year)	Title-24 Electricity Energy Intensity (kWhr/size/year)	Title-24 Natural Gas Energy Intensity (KBTU/size/year)	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
Residential (Affordable Senior Apartments)	183,291.71	555,342.15	**51,951.40**	**483,846.67**	131,340.31	71,495.48
Residential (Townhomes)	417,905.09	1,266,180.09	**118,449.19**	**1,103,170.40**	299,455.90	163,009.69
Residential (Duets)	428,902.59	1,299,500.62	**121,566.27**	**1,132,201.20**	307,336.32	167,299.42
Health Club	4,192.02	18,704.44	**3,575.93**	**7,041.62**	616.09	11,662.82

Converting Natural Gas Consumption to Electricity Consumption for All-Electric Buildings

Land Use Subtype	Title-24 Natural Gas Energy Intensity (KBTU/size/year)	Converted Title-24 Energy Intensity (kWh/size/year)*	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)	Converted Nontitle-24 Energy Intensity (kWh/size/year)*
Residential (Affordable Senior Apartments)	483,846.67	141.81	**71,495.48**	**20.95**
Residential (Townhomes)	1,103,170.40	323.32	**163,009.69**	**47.78**
Residential (Duets)	1,132,201.20	331.83	**167,299.42**	**49.03**
Health Club	7,041.62	2.06	**11,662.82**	**3.42**

*Assumes 3,412 BTU per kWh.

Source: EIA. 2023. Units and calculators explained British thermal units (Btu). https://www.eia.gov/energyexplained/units-and-calculators/british-thermal-units.php.

Adjusted CalEEMod Energy Use

Land Use Subtype	Total Annual Electricity Consumption (kWh/year)	Total Annual Natural Gas Consumption (kBTU/year)	Title-24 Electricity Energy Intensity (kWhr/size/year)	Title-24 Natural Gas Energy Intensity (KBTU/size/year)	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
Residential (Affordable Senior Apartments)	183,454.47	0.00	**52,093.21**	**0.00**	131,361.26	0.00
Residential (Townhomes)	418,276.19	0.00	**118,772.51**	**0.00**	299,503.68	0.00
Residential (Duets)	429,283.45	0.00	**121,898.10**	**0.00**	307,385.35	0.00
Health Club	4,197.50	0.00	**3,577.99**	**0.00**	619.51	0.00
Total	**1,035,211.61**					

Changes to the CalEEMod Defaults - Fleet Mix 2030: Proposed Uses

Trips 1,718

Default	HHD	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHD	OBUS	SBUS	UBUS
FleetMix (Model Default Percentage	0.6044304	48.83451164	3.810391575	24.15012866	2.853986435	0.769468304	2.265510336	14.61440176	0.3358013	1.57117825	0.059122901	0.095979997	0.0350858
FleetMix (Converted)	0.006044304	0.488345116	0.038103916	0.241501287	0.028539864	0.007694683	0.022655103	0.146144018	0.003358013	0.015711783	0.000591229	0.0009598	0.000350858
Trips	10	839	65	415	49	13	39	251	6	27	1	2	1
Percent		79%			6%			15%					
without buses/MH	0.006044	0.488345	0.038104	0.241501	0.028540	0.007695	0.022655	0.146144	0.000000	0.015712	0	0.000000	0
Percent		79%			6%			15%					
Adjusted without buses/MH	0.006593	0.488345	0.038104	0.241501	0.031129	0.008393	0.024710	0.146144	0.000000	0.017137	0.000000	0.000000	0.000000
Percent adjusted		79%			6%			15%					
Assumed Mix		97.0%			1.00%			2.00%					
Adjusted with Assumed Mix Percentage	0.001042	0.597601	0.046629	0.295532	0.004921	0.001327	0.030238	0.020000	0.000000	0.002709	0.000000	0.000000	0.000000
Adjusted CalEEMod Input	0.104229	59.760122	4.662880	29.553170	0.492146	0.132688	3.023828	2.000000	0.000000	0.270937	0.000000	0.000000	0.000000
Percent Check:		97%			1%			2%					
Trips	2	1,027	80	508	8	2	52	34	0	5	0	0	0
		1,666			*102*			*34*					

Fleet mix for the project is modified to reflect a higher proportion of passenger vehicles that the regional VMT. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.

CalEEMod Inputs- 5600 Beach Boulevard Residential Development Project, Existing Amway Nutrilite Center Campus, Operation

Name: 5600 Beach Boulevard Residential Development Project
Project Number: CBP-06
Project Location: 5600 Beach Boulevard, Buena Park, Orange County
County: South Coast
Climate Zone: 8
Land Use Setting: Urban
Gas Utility Company: Southern California Gas
Electric Utility Company: Southern California Edison
Air Basin: South Coast Air Basin
Air District: South Coast AQMD
SRA: 16 - North Orange County

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit	Size Metric	Lot Acreage	Land Use Square Feet	Landscaped Area
Industrial	General Heavy Industry	370.03	1000 SQFT	8.49	370,031	NA
Parking	Parking Lot	196.12	1000 SQFT	4.50	196,119	NA
				13.00		

Notes
[1] General Heavy Industrial land use was used as a surrogate for General Light Industrial due to size limitations in CalEEMod.

Trips (Average Daily)[1]

Land Use Type	Average Daily Trips	CalEEMod Trip Rate	Saturday Trips	CalEEMod Trip Rate	Sunday Trips	CalEEMod Trip Rate
Industrial	1,332	**3.60**	1,332	**3.60**	1,332	**3.60**

Source: LLG, 2025. Table 5, Project Trip Generation Estimates.
Notes
[1] Trips calculated based on ITE Trip Gen 12th Edition daily trip rates for Light Industrial land use.

Water Use (CalEEMod Defaults)

	Indoor (gpy)	Outdoor (gpy)
Industrial	85,569,438	0

Notes
[1] Assumes 100% aerobic treatment.

Solid Waste (CalEEMod Defaults)

Land Use	Total Solid Waste (tons/yr)
Industrial	458.84

Architectural Coating

	Percent Painted
Interior Painted:	100%
Exterior Painted:	100%

South Coast AQMD Rule 1113

Interior Paint VOC content:	50	grams per liter
Exterior Paint VOC content:	50	grams per liter
Parking Paint VOC content:	100	grams per liter

Structures	Land Use Square Feet	CalEEMod Factor[2]	Total Paintable Surface Area	Paintable Interior Area[1]	Paintable Exterior Area[1]
Non-Residential Structures					
Industrial	370,031	2.0	740,062	555,047	185,016
				555,047	**185,016**
Parking					
Parking Area	196,119	6%	11,767	-	11,767
					11,767

Notes

[1] CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.

[2] CalEEMod assumes the total surface for painting equals 2 times the floor square footage for nonresidential uses as defined by user.

[3] Assumes that all parking surfaces will be striped. CalEEMod methodology assumes 6% of surface area is striped.

Electricity (Buildings)

CalEEMod Energy Use (CalEEMod Defaults)

Land Use Subtype	Total Annual Electricity Consumption (kWh/year)	Total Annual Natural Gas Consumption (kBTU/year)	Title-24 Electricity Energy Intensity (kWhr/size/year)	Title-24 Natural Gas Energy Intensity (KBTU/size/year)	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
Industrial	3,549,609.72	15,838,045.24	**3,027,932.23**	**5,962,516.02**	521,677.49	9,875,529.22
Parking	171,801.12	0.00	**171,801.12**	**0.00**	0.00	0.00

Notes

[1] Default energy consumptions rates for General Heavy Industrial and General Light Industrial are the same in CalEEMod.

Changes to the CalEEMod Defaults - Fleet Mix 2026: Existing Uses

Trips 1,332

Default	HHD	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHD	OBUS	SBUS	UBUS
FleetMix (Model Default Percentage	0.564967096	49.71027076	4.069213942	23.38387221	2.760687657	0.715995813	2.201723866	14.48949724	0.3682476	1.542854495	0.060298003	0.096663297	0.035708401
FleetMix (Converted)	0.005649671	0.497102708	0.040692139	0.233838722	0.027606877	0.007159958	0.022017239	0.144894972	0.003682476	0.015428545	0.00060298	0.000966633	0.000357084
Trips	8	662	54	311	37	10	29	193	5	21	1	1	0
Percent		79%			6%			14%					
without buses/MH	0.005650	0.497103	0.040692	0.233839	0.027607	0.007160	0.022017	0.144895	0.000000	0.015429	0	0.000000	0
Percent		79%			6%			14%					
Adjusted without buses/MH	0.006217	0.497103	0.040692	0.233839	0.030380	0.007879	0.024229	0.144895	0.000000	0.016978	0.000000	0.000000	0.000000
Percent adjusted		80%			6%			14%					
Assumed Mix		97.0%			1.00%			2.00%					
Adjusted with Assumed Mix Percentage	0.001012	0.605871	0.049596	0.285004	0.004943	0.001282	0.029530	0.020000	0.000000	0.002763	0.000000	0.000000	0.000000
Adjusted CalEEMod Input	0.101167	60.587070	4.959574	28.500354	0.494348	0.128211	2.953002	2.000000	0.000000	0.276274	0.000000	0.000000	0.000000
Percent Check:		97%			1%			2%					
Trips	1	807	66	380	7	2	39	27	0	4	0	0	0
		1,292			*78*			*27*					

Fleet mix for the project is modified to reflect a higher proportion of passenger vehicles that the regional VMT. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.

Changes to the CalEEMod Defaults - Fleet Mix 2030: Existing Uses

Trips 1,332

Default	HHD	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHD	OBUS	SBUS	UBUS
FleetMix (Model Default Percentage	0.6044304	48.83451164	3.810391575	24.15012866	2.853986435	0.769468304	2.265510336	14.61440176	0.3358013	1.57117825	0.059122901	0.095979997	0.0350858
FleetMix (Converted)	0.006044304	0.488345116	0.038103916	0.241501287	0.028539864	0.007694683	0.022655103	0.146144018	0.003358013	0.015711783	0.000591229	0.0009598	0.000350858
Trips	8	650	51	322	38	10	30	195	4	21	1	1	0
Percent		79%			6%			15%					
without buses/MH	0.006044	0.488345	0.038104	0.241501	0.028540	0.007695	0.022655	0.146144	0.000000	0.015712	0	0.000000	0
Percent		79%			6%			15%					
Adjusted without buses/MH	0.006593	0.488345	0.038104	0.241501	0.031129	0.008393	0.024710	0.146144	0.000000	0.017137	0.000000	0.000000	0.000000
Percent adjusted		79%			6%			15%					
Assumed Mix		97.0%			1.00%			2.00%					
Adjusted with Assumed Mix Percentage	0.001042	0.597601	0.046629	0.295532	0.004921	0.001327	0.030238	0.020000	0.000000	0.002709	0.000000	0.000000	0.000000
Adjusted CalEEMod Input	0.104229	59.760122	4.662880	29.553170	0.492146	0.132688	3.023828	2.000000	0.000000	0.270937	0.000000	0.000000	0.000000
Percent Check:		97%			1%			2%					
Trips	1	796	62	394	7	2	40	27	0	4	0	0	0
		1,292			*79*			*27*					

Fleet mix for the project is modified to reflect a higher proportion of passenger vehicles that the regional VMT. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.

Emissions Worksheet

Unmitigated Regional Construction Emissions Worksheet:

P1 Demolition (2027)							
		ROG	NOx	CO	SO	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.44	3.89	4.88	0.01	0.09	0.09
	Demolition					3.32	0.50
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.44**	**3.89**	**4.88**	**0.01**	**3.41**	**0.59**
Offsite							
	Worker	0.03	0.03	0.49	0.00	0.13	0.03
	Vendor	0.00	0.06	0.03	0.00	0.02	0.01
	Hauling	0.06	4.85	2.17	0.03	1.16	0.37
	Total	**0.09**	**4.94**	**2.69**	**0.03**	**1.31**	**0.40**
TOTAL		***0.53***	***8.84***	***7.57***	***0.04***	***4.73***	***0.99***

P1 Demolition Debris Onsite Reprocessing (2027)							
		ROG	NOx	CO	SO	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	33.91	0.85	48.10	0.00	0.59	0.44
	Demolition					3.32	0.50
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**33.91**	**0.85**	**48.10**	**0.00**	**3.91**	**0.95**
Offsite							
	Worker	0.01	0.01	0.12	0.00	0.03	0.01
	Vendor	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
	Total	**0.01**	**0.01**	**0.12**	**0.00**	**0.03**	**0.01**
TOTAL		***33.92***	***0.86***	***48.22***	***0.00***	***3.94***	***0.95***

P1 Site Preparation (2027)							
		ROG	NOx	CO	SO	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	3.05	27.97	28.28	0.05	1.17	1.08
	Dust From Material Movement					7.67	3.94
	Onsite truck	0.00	0.02	0.01	0.00	1.07	0.11
	Total	**3.05**	**28.00**	**28.29**	**0.05**	**9.91**	**5.13**
Offsite							
	Worker	0.05	0.05	0.87	0.00	0.23	0.05
	Vendor	0.01	0.58	0.29	0.00	0.17	0.05
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.06**	**0.64**	**1.15**	**0.00**	**0.40**	**0.10**
TOTAL		***3.11***	***28.63***	***29.45***	***0.05***	***10.31***	***5.23***

P2 Rough Grading (2027)							
		ROG	NOx	CO	SO	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	2.95	25.58	27.28	0.06	1.04	0.96
	Dust From Material Movement					3.59	1.43
	Onsite truck	0.00	0.02	0.01	0.00	1.22	0.12
	Total	**2.95**	**25.60**	**27.30**	**0.06**	**5.86**	**2.51**
Offsite							
	Worker	0.06	0.06	0.99	0.00	0.26	0.06
	Vendor	0.01	0.71	0.35	0.01	0.20	0.06
	Hauling	0.05	4.11	1.84	0.02	0.99	0.31
	Total	**0.13**	**4.88**	**3.18**	**0.03**	**1.45**	**0.43**
TOTAL		***3.07***	***30.48***	***30.47***	***0.09***	***7.31***	***2.94***

P3 Fine Grading (2027)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Winter**					
	Off-Road Equipment	2.95	25.58	27.28	0.06	1.04	0.96
	Dust From Material Movement					3.59	1.42
	Onsite truck	0.00	0.03	0.01	0.00	1.22	0.12
	Total	**2.95**	**25.61**	**27.30**	**0.06**	**5.86**	**2.51**
Offsite							
	Worker	0.06	0.06	0.85	0.00	0.26	0.06
	Vendor	0.01	0.74	0.36	0.01	0.20	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.07**	**0.80**	**1.21**	**0.01**	**0.46**	**0.12**
TOTAL		***3.02***	***26.40***	***28.51***	***0.07***	***6.32***	***2.63***

P3 Fine Grading (2028)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	2.88	24.33	27.17	0.06	0.99	0.91
	Dust From Material Movement					3.59	1.42
	Onsite truck	0.00	0.02	0.01	0.00	1.22	0.12
	Total	**2.88**	**24.35**	**27.18**	**0.06**	**5.80**	**2.45**
Offsite							
	Worker	0.06	0.05	0.93	0.00	0.26	0.06
	Vendor	0.01	0.68	0.34	0.01	0.20	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.07**	**0.73**	**1.27**	**0.01**	**0.46**	**0.12**
TOTAL		***2.95***	***25.08***	***28.46***	***0.07***	***6.26***	***2.57***

P3 Utility Trenching (2027)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Winter**					
	Off-Road Equipment	0.06	0.81	1.50	0.00	0.02	0.02
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.06**	**0.81**	**1.50**	**0.00**	**0.02**	**0.02**
Offsite							
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Vendor	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
	Total	**0.01**	**0.01**	**0.11**	**0.00**	**0.03**	**0.01**
TOTAL		***0.07***	***0.82***	***1.61***	***0.00***	***0.05***	***0.03***

P3 Utility Trenching (2028)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.06	0.79	1.50	0.00	0.02	0.02
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.06**	**0.79**	**1.50**	**0.00**	**0.02**	**0.02**
Offsite							
	Worker	0.01	0.01	0.12	0.00	0.03	0.01
	Vendor	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
	Total	**0.01**	**0.01**	**0.12**	**0.00**	**0.03**	**0.01**
TOTAL		***0.07***	***0.80***	***1.62***	***0.00***	***0.05***	***0.03***

P4.1 Building Construction (Senior Affordable Apartments) (2027)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Winter**					
	Off-Road Equipment	0.48	4.56	6.90	0.01	0.17	0.15
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.48**	**4.56**	**6.90**	**0.01**	**0.17**	**0.15**
Offsite							
	Worker	0.10	0.11	1.53	0.00	0.47	0.11
	Vendor	0.00	0.17	0.08	0.00	0.05	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.11**	**0.28**	**1.61**	**0.00**	**0.52**	**0.12**
TOTAL		***0.58***	***4.84***	***8.51***	***0.01***	***0.68***	***0.28***

P4.1 Building Construction (Senior Affordable Apartments) (2028)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.46	4.30	6.91	0.01	0.15	0.14
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.46**	**4.30**	**6.91**	**0.01**	**0.15**	**0.14**
Offsite							
	Worker	0.10	0.09	1.68	0.00	0.47	0.11
	Vendor	0.00	0.16	0.08	0.00	0.05	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.10**	**0.25**	**1.76**	**0.00**	**0.52**	**0.12**
TOTAL		***0.56***	***4.55***	***8.67***	***0.01***	***0.67***	***0.26***

P4.1 Building Construction (Senior Affordable Apartments) (2029)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.45	4.11	6.89	0.01	0.14	0.13
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.45**	**4.11**	**6.89**	**0.01**	**0.14**	**0.13**
Offsite							
	Worker	0.10	0.09	1.58	0.00	0.47	0.11
	Vendor	0.00	0.15	0.08	0.00	0.05	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.10**	**0.24**	**1.66**	**0.00**	**0.52**	**0.12**
TOTAL		***0.55***	***4.36***	***8.55***	***0.01***	***0.65***	***0.25***

P4.1 Paving (2029)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.38	3.16	3.63	0.01	0.13	0.12
	Paving	0.00					
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.38**	**3.16**	**3.63**	**0.01**	**0.13**	**0.12**
Offsite							
	Worker	0.04	0.04	0.66	0.00	0.20	0.05
	Vendor	0.00	0.06	0.03	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.04**	**0.09**	**0.69**	**0.00**	**0.21**	**0.05**
TOTAL		***0.42***	***3.25***	***4.32***	***0.01***	***0.34***	***0.17***

P4.1 Architectural Coating (2029)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.10	0.79	1.11	0.00	0.01	0.01
	Architectural Coatings	10.34					
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**10.44**	**0.79**	**1.11**	**0.00**	**0.01**	**0.01**
Offsite							
	Worker	0.02	0.02	0.32	0.00	0.09	0.02
	Vendor	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
	Total	**0.02**	**0.02**	**0.32**	**0.00**	**0.09**	**0.02**
TOTAL		***10.46***	***0.81***	***1.43***	***0.00***	***0.11***	***0.03***

P4.1 Finishing and Landscaping (2029)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.06	0.78	1.50	0.00	0.02	0.02
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.06**	**0.78**	**1.50**	**0.00**	**0.02**	**0.02**
Offsite							
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Vendor	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
	Total	**0.01**	**0.01**	**0.11**	**0.00**	**0.03**	**0.01**
TOTAL		***0.06***	***0.79***	***1.61***	***0.00***	***0.05***	***0.03***

P4.2 Building Construction (Townhomes and Duet Homes) (2028)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.99	8.92	12.94	0.02	0.30	0.28
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.99**	**8.92**	**12.94**	**0.02**	**0.30**	**0.28**
Offsite							
	Worker	0.46	0.43	7.77	0.00	2.18	0.51
	Vendor	0.02	0.73	0.37	0.01	0.22	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.48**	**1.16**	**8.13**	**0.01**	**2.39**	**0.57**
TOTAL		***1.47***	***10.08***	***21.07***	***0.03***	***2.69***	***0.85***

P4.2 Building Construction (Townhomes and Duet Homes) (2029)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.97	8.58	12.90	0.02	0.28	0.25
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.97**	**8.58**	**12.90**	**0.02**	**0.28**	**0.25**
Offsite							
	Worker	0.45	0.42	7.30	0.00	2.18	0.51
	Vendor	0.02	0.70	0.35	0.01	0.22	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.46**	**1.12**	**7.66**	**0.01**	**2.39**	**0.57**
TOTAL		***1.43***	***9.70***	***20.56***	***0.03***	***2.67***	***0.83***

P4.2 Building Construction (Townhomes and Duet Homes) (2030)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.94	8.39	12.88	0.02	0.26	0.24
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.94**	**8.39**	**12.88**	**0.02**	**0.26**	**0.24**
Offsite							
	Worker	0.43	0.35	6.91	0.00	2.18	0.51
	Vendor	0.02	0.67	0.34	0.01	0.22	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.44**	**1.02**	**7.25**	**0.01**	**2.39**	**0.57**
TOTAL		***1.38***	***9.42***	***20.14***	***0.03***	***2.65***	***0.81***

P4.2 Paving (2030)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.64	6.28	9.90	0.01	0.22	0.20
	Paving	0.15					
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.80**	**6.28**	**9.90**	**0.01**	**0.22**	**0.20**
Offsite							
	Worker	0.04	0.03	0.62	0.00	0.20	0.05
	Vendor	0.00	0.05	0.03	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.04**	**0.09**	**0.65**	**0.00**	**0.21**	**0.05**
TOTAL		***0.84***	***6.37***	***10.55***	***0.01***	***0.43***	***0.25***

P4.2 Architectural Coating (2030)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.10	0.78	1.11	0.00	0.01	0.01
	Architectural Coatings	97.90					
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**98.00**	**0.78**	**1.11**	**0.00**	**0.01**	**0.01**
Offsite							
	Worker	0.09	0.07	1.38	0.00	0.44	0.10
	Vendor	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
	Total	**0.09**	**0.07**	**1.38**	**0.00**	**0.44**	**0.10**
TOTAL		***98.09***	***0.86***	***2.49***	***0.00***	***0.45***	***0.11***

P4.2 Finishing and Landscaping (2030)						
	ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite	**Summer**					
Off-Road Equipment	0.06	0.77	1.50	0.00	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.06**	**0.77**	**1.50**	**0.00**	**0.02**	**0.02**
Offsite						
Worker	0.01	0.01	0.10	0.00	0.03	0.01
Vendor	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
Total	**0.01**	**0.01**	**0.10**	**0.00**	**0.03**	**0.01**
TOTAL	***0.06***	***0.77***	***1.61***	***0.00***	***0.05***	***0.02***

	ROG	**NOx**	**CO**	**SO_2**	**PM10 Total**	**PM2.5 Total**
P1 Demolition, P1 Demolition Debris Onsite Reprocessing, and Site Preparation	***38***	***38***	***85***	***0***	***19***	***7***
P2 Rough Grading	***3***	***30***	***30***	***0***	***7***	***3***
P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction 2027	***4***	***32***	***39***	***0***	***7***	***3***
P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction 2028	***4***	***30***	***39***	***0***	***7***	***3***
P4.1 Building Construction and P4.2 Building Construction 2028	***2***	***15***	***30***	***0***	***3***	***1***
P4.1 Building Construction and P4.2 Building Construction 2029	***2***	***14***	***29***	***0***	***3***	***1***
P4.1 Building Construction, P4.2 Building Construction, P4.1 Paving, P4.1 Architectural Coating, and P4.1 Finishing and Landscaping	***13***	***19***	***36***	***0***	***4***	***1***
P4.2 Building Construction 2029	***1***	***10***	***21***	***0***	***3***	***1***
P4.2 Building Construction 2030	***1***	***9***	***20***	***0***	***3***	***1***
P4.2 Building Construction, P4.2 Paving, P4.2 Architectural Coating, and P4.2 Finishing and Landscaping	***100***	***17***	***35***	***0***	***4***	***1***
MAX DAILY	**100**	**38**	**85**	**0**	**19**	**7**
Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	**Yes**	No	No	No	No	No

Mitigated Regional Construction Emissions Worksheet:

Mitigation: Super-Compliant VOC paint

Only the construction phase requiring VOC mitigation is shown, as the remaining phases do not exceed applicable VOC regional thresholds.

P4.2 Building Construction (Townhomes and Duet Homes) (2028)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.99	8.92	12.94	0.02	0.30	0.28
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.99**	**8.92**	**12.94**	**0.02**	**0.30**	**0.28**
Offsite							
	Worker	0.46	0.43	7.77	0.00	2.18	0.51
	Vendor	0.02	0.73	0.37	0.01	0.22	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.48**	**1.16**	**8.13**	**0.01**	**2.39**	**0.57**
TOTAL		***1.47***	***10.08***	***21.07***	***0.03***	***2.69***	***0.85***

P4.2 Building Construction (Townhomes and Duet Homes) (2029)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.97	8.58	12.90	0.02	0.28	0.25
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.97**	**8.58**	**12.90**	**0.02**	**0.28**	**0.25**
Offsite							
	Worker	0.45	0.42	7.30	0.00	2.18	0.51
	Vendor	0.02	0.70	0.35	0.01	0.22	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.46**	**1.12**	**7.66**	**0.01**	**2.39**	**0.57**
TOTAL		***1.43***	***9.70***	***20.56***	***0.03***	***2.67***	***0.83***

P4.2 Building Construction (Townhomes and Duet Homes) (2030)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.94	8.39	12.88	0.02	0.26	0.24
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.94**	**8.39**	**12.88**	**0.02**	**0.26**	**0.24**
Offsite							
	Worker	0.43	0.35	6.91	0.00	2.18	0.51
	Vendor	0.02	0.67	0.34	0.01	0.22	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.44**	**1.02**	**7.25**	**0.01**	**2.39**	**0.57**
TOTAL		***1.38***	***9.42***	***20.14***	***0.03***	***2.65***	***0.81***

P4.2 Paving (2030)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.64	6.28	9.90	0.01	0.22	0.20
	Paving	0.15					
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.80**	**6.28**	**9.90**	**0.01**	**0.22**	**0.20**
Offsite							
	Worker	0.04	0.03	0.62	0.00	0.20	0.05
	Vendor	0.00	0.05	0.03	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.04**	**0.09**	**0.65**	**0.00**	**0.21**	**0.05**
TOTAL		***0.84***	***6.37***	***10.55***	***0.01***	***0.43***	***0.25***

P4.2 Architectural Coating (2030)						
	ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite	**Summer**					
Off-Road Equipment	0.10	0.78	1.11	0.00	0.01	0.01
Architectural Coatings	19.50					
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
Total	**19.60**	**0.78**	**1.11**	**0.00**	**0.01**	**0.01**
Offsite						
Worker	0.09	0.07	1.38	0.00	0.44	0.10
Vendor	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
Total	**0.09**	**0.07**	**1.38**	**0.00**	**0.44**	**0.10**
TOTAL	***19.69***	***0.86***	***2.49***	***0.00***	***0.45***	***0.11***

P4.2 Finishing and Landscaping (2030)						
	ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite	**Summer**					
Off-Road Equipment	0.06	0.77	1.50	0.00	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.06**	**0.77**	**1.50**	**0.00**	**0.02**	**0.02**
Offsite						
Worker	0.01	0.01	0.10	0.00	0.03	0.01
Vendor	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
Total	**0.01**	**0.01**	**0.10**	**0.00**	**0.03**	**0.01**
TOTAL	***0.06***	***0.77***	***1.61***	***0.00***	***0.05***	***0.02***

	ROG	**NOx**	**CO**	**SO$_2$**	**PM10 Total**	**PM2.5 Total**
P4.2 Building Construction, P4.2 Paving, P4.2 Architectural Coating, and P4.2 Finishing and Landscaping	***22***	***17***	***35***	***0***	***4***	***1***
MAX DAILY	**22**	**17**	**35**	**0**	**4**	**1**
Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

Mitigated Regional Construction Emissions Worksheet:

Mitigation: Super-Compliant VOC paint for all coating phases and Tier 4-Final Equipment

P1 Demolition (2027)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.10	3.16	4.71	0.01	0.01	0.01
	Demolition					3.32	0.50
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.10**	**3.16**	**4.71**	**0.01**	**3.33**	**0.51**
Offsite							
	Worker	0.03	0.03	0.49	0.00	0.13	0.03
	Vendor	0.00	0.06	0.03	0.00	0.02	0.01
	Hauling	0.06	4.85	2.17	0.03	1.16	0.37
	Total	**0.09**	**4.94**	**2.69**	**0.03**	**1.31**	**0.40**
TOTAL		***0.20***	***8.10***	***7.40***	***0.04***	***4.64***	***0.92***

P1 Demolition Debris Onsite Reprocessing (2027)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	33.91	0.85	48.10	0.00	0.59	0.44
	Demolition					3.32	0.50
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**33.91**	**0.85**	**48.10**	**0.00**	**3.91**	**0.95**
Offsite							
	Worker	0.01	0.01	0.12	0.00	0.03	0.01
	Vendor	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
	Total	**0.01**	**0.01**	**0.12**	**0.00**	**0.03**	**0.01**
TOTAL		***33.92***	***0.86***	***48.22***	***0.00***	***3.94***	***0.95***

P1 Site Preparation (2027)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.50	2.59	28.31	0.05	0.10	0.10
	Dust From Material Movement					7.67	3.94
	Onsite truck	0.00	0.02	0.01	0.00	1.07	0.11
	Total	**0.50**	**2.61**	**28.32**	**0.05**	**8.84**	**4.15**
Offsite							
	Worker	0.05	0.05	0.87	0.00	0.23	0.05
	Vendor	0.01	0.58	0.29	0.00	0.17	0.05
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.06**	**0.64**	**1.15**	**0.00**	**0.40**	**0.10**
TOTAL		***0.56***	***3.25***	***29.48***	***0.05***	***9.23***	***4.25***

P2 Rough Grading (2027)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.64	4.43	35.35	0.06	0.12	0.12
	Dust From Material Movement					3.59	1.43
	Onsite truck	0.00	0.02	0.01	0.00	1.22	0.12
	Total	**0.64**	**4.45**	**35.36**	**0.06**	**4.94**	**1.67**
Offsite							
	Worker	0.06	0.06	0.99	0.00	0.26	0.06
	Vendor	0.01	0.71	0.35	0.01	0.20	0.06
	Hauling	0.05	4.11	1.84	0.02	0.99	0.31
	Total	**0.13**	**4.88**	**3.18**	**0.03**	**1.45**	**0.43**
TOTAL		***0.77***	***9.33***	***38.54***	***0.09***	***6.39***	***2.10***

P3 Fine Grading (2027)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Winter**					
	Off-Road Equipment	0.64	4.43	35.35	0.06	0.12	0.12
	Dust From Material Movement					3.59	1.42
	Onsite truck	0.00	0.03	0.01	0.00	1.22	0.12
	Total	**0.64**	**4.45**	**35.36**	**0.06**	**4.94**	**1.67**
Offsite							
	Worker	0.06	0.06	0.85	0.00	0.26	0.06
	Vendor	0.01	0.74	0.36	0.01	0.20	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.07**	**0.80**	**1.21**	**0.01**	**0.46**	**0.12**
TOTAL		***0.71***	***5.25***	***36.57***	***0.07***	***5.40***	***1.79***

P3 Fine Grading (2028)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.64	4.43	35.35	0.06	0.12	0.12
	Dust From Material Movement					3.59	1.42
	Onsite truck	0.00	0.02	0.01	0.00	1.22	0.12
	Total	**0.64**	**4.45**	**35.36**	**0.06**	**4.94**	**1.67**
Offsite							
	Worker	0.06	0.05	0.93	0.00	0.26	0.06
	Vendor	0.01	0.68	0.34	0.01	0.20	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.07**	**0.73**	**1.27**	**0.01**	**0.46**	**0.12**
TOTAL		***0.71***	***5.18***	***36.63***	***0.07***	***5.40***	***1.79***

P3 Utility Trenching (2027)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Winter**					
	Off-Road Equipment	0.04	1.27	1.71	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.04**	**1.27**	**1.71**	**0.00**	**0.00**	**0.00**
Offsite							
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Vendor	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
	Total	**0.01**	**0.01**	**0.11**	**0.00**	**0.03**	**0.01**
TOTAL		***0.05***	***1.28***	***1.82***	***0.00***	***0.04***	***0.01***

P3 Utility Trenching (2028)							
		ROG	NOx	CO	SO[2]	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.04	1.27	1.71	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.04**	**1.27**	**1.71**	**0.00**	**0.00**	**0.00**
Offsite							
	Worker	0.01	0.01	0.12	0.00	0.03	0.01
	Vendor	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
	Total	**0.01**	**0.01**	**0.12**	**0.00**	**0.03**	**0.01**
TOTAL		***0.05***	***1.28***	***1.83***	***0.00***	***0.04***	***0.01***

P4.1 Building Construction (Senior Affordable Apartments) (2027)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Winter**					
	Off-Road Equipment	0.12	0.64	8.10	0.01	0.02	0.02
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.12**	**0.64**	**8.10**	**0.01**	**0.02**	**0.02**
Offsite							
	Worker	0.10	0.11	1.53	0.00	0.47	0.11
	Vendor	0.00	0.17	0.08	0.00	0.05	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.11**	**0.28**	**1.61**	**0.00**	**0.52**	**0.12**
TOTAL		***0.23***	***0.92***	***9.72***	***0.01***	***0.54***	***0.15***

P4.1 Building Construction (Senior Affordable Apartments) (2028)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.12	0.64	8.10	0.01	0.02	0.02
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.12**	**0.64**	**8.10**	**0.01**	**0.02**	**0.02**
Offsite							
	Worker	0.10	0.09	1.68	0.00	0.47	0.11
	Vendor	0.00	0.16	0.08	0.00	0.05	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.10**	**0.25**	**1.76**	**0.00**	**0.52**	**0.12**
TOTAL		***0.23***	***0.89***	***9.86***	***0.01***	***0.54***	***0.15***

P4.1 Building Construction (Senior Affordable Apartments) (2029)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.12	0.64	8.10	0.01	0.02	0.02
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.12**	**0.64**	**8.10**	**0.01**	**0.02**	**0.02**
Offsite							
	Worker	0.10	0.09	1.58	0.00	0.47	0.11
	Vendor	0.00	0.15	0.08	0.00	0.05	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.10**	**0.24**	**1.66**	**0.00**	**0.52**	**0.12**
TOTAL		***0.22***	***0.88***	***9.76***	***0.01***	***0.54***	***0.15***

P4.1 Paving (2029)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.21	1.96	3.77	0.01	0.06	0.05
	Paving	0.00					
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.21**	**1.96**	**3.77**	**0.01**	**0.06**	**0.05**
Offsite							
	Worker	0.04	0.04	0.66	0.00	0.20	0.05
	Vendor	0.00	0.06	0.03	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.04**	**0.09**	**0.69**	**0.00**	**0.21**	**0.05**
TOTAL		***0.25***	***2.05***	***4.46***	***0.01***	***0.27***	***0.10***

P4.1 Architectural Coating (2029)							
		ROG	NOx	CO	SO	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.02	0.65	0.96	0.00	0.00	0.00
	Architectural Coatings	2.06					
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**2.08**	**0.65**	**0.96**	**0.00**	**0.00**	**0.00**
Offsite							
	Worker	0.02	0.02	0.32	0.00	0.09	0.02
	Vendor	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
	Total	**0.02**	**0.02**	**0.32**	**0.00**	**0.09**	**0.02**
TOTAL		***2.10***	***0.66***	***1.28***	***0.00***	***0.10***	***0.02***

P4.1 Finishing and Landscaping (2029)							
		ROG	NOx	CO	SO	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.04	1.27	1.71	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.04**	**1.27**	**1.71**	**0.00**	**0.00**	**0.00**
Offsite							
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Vendor	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
	Total	**0.01**	**0.01**	**0.11**	**0.00**	**0.03**	**0.01**
TOTAL		***0.05***	***1.28***	***1.82***	***0.00***	***0.04***	***0.01***

P4.2 Building Construction (Townhomes and Duet Homes) (2028)							
		ROG	NOx	CO	SO	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.33	2.81	14.82	0.02	0.07	0.07
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.33**	**2.81**	**14.82**	**0.02**	**0.07**	**0.07**
Offsite							
	Worker	0.46	0.43	7.77	0.00	2.18	0.51
	Vendor	0.02	0.73	0.37	0.01	0.22	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.48**	**1.16**	**8.13**	**0.01**	**2.39**	**0.57**
TOTAL		***0.80***	***3.97***	***22.95***	***0.03***	***2.47***	***0.65***

P4.2 Building Construction (Townhomes and Duet Homes) (2029)							
		ROG	NOx	CO	SO	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.33	2.81	14.82	0.02	0.07	0.07
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.33**	**2.81**	**14.82**	**0.02**	**0.07**	**0.07**
Offsite							
	Worker	0.45	0.42	7.30	0.00	2.18	0.51
	Vendor	0.02	0.70	0.35	0.01	0.22	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.46**	**1.12**	**7.66**	**0.01**	**2.39**	**0.57**
TOTAL		***0.79***	***3.93***	***22.48***	***0.03***	***2.47***	***0.65***

P4.2 Building Construction (Townhomes and Duet Homes) (2030)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.33	2.81	14.82	0.02	0.07	0.07
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.33**	**2.81**	**14.82**	**0.02**	**0.07**	**0.07**
Offsite							
	Worker	0.43	0.35	6.91	0.00	2.18	0.51
	Vendor	0.02	0.67	0.34	0.01	0.22	0.06
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.44**	**1.02**	**7.25**	**0.01**	**2.39**	**0.57**
TOTAL		***0.77***	***3.83***	***22.07***	***0.03***	***2.47***	***0.65***

P4.2 Paving (2030)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.16	1.93	10.60	0.01	0.03	0.03
	Paving	0.15					
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.31**	**1.93**	**10.60**	**0.01**	**0.03**	**0.03**
Offsite							
	Worker	0.04	0.03	0.62	0.00	0.20	0.05
	Vendor	0.00	0.05	0.03	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.04**	**0.09**	**0.65**	**0.00**	**0.21**	**0.05**
TOTAL		***0.35***	***2.02***	***11.25***	***0.01***	***0.24***	***0.08***

P4.2 Architectural Coating (2030)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.02	0.65	0.96	0.00	0.00	0.00
	Architectural Coatings	19.50					
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**19.52**	**0.65**	**0.96**	**0.00**	**0.00**	**0.00**
Offsite							
	Worker	0.09	0.07	1.38	0.00	0.44	0.10
	Vendor	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
	Total	**0.09**	**0.07**	**1.38**	**0.00**	**0.44**	**0.10**
TOTAL		***19.61***	***0.72***	***2.35***	***0.00***	***0.44***	***0.10***

P4.2 Finishing and Landscaping (2030)							
		ROG	NOx	CO	SO$_2$	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.04	1.27	1.71	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.04**	**1.27**	**1.71**	**0.00**	**0.00**	**0.00**
Offsite							
	Worker	0.01	0.01	0.10	0.00	0.03	0.01
	Vendor	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
	Total	**0.01**	**0.01**	**0.10**	**0.00**	**0.03**	**0.01**
TOTAL		***0.05***	***1.27***	***1.82***	***0.00***	***0.04***	***0.01***

	ROG	NOx	CO	SO_2	PM10 Total	PM2.5 Total
P1 Demolition, P1 Demolition Debris Onsite Reprocessing, and Site Preparation	***35***	***12***	***85***	***0***	***18***	***6***
P2 Rough Grading	***1***	***9***	***39***	***0***	***6***	***2***
P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction 2027	***1***	***7***	***48***	***0***	***6***	***2***
P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction 2028	***1***	***7***	***48***	***0***	***6***	***2***
P4.1 Building Construction and P4.2 Building Construction 2028	***1***	***5***	***33***	***0***	***3***	***1***
P4.1 Building Construction and P4.2 Building Construction 2029	***1***	***5***	***32***	***0***	***3***	***1***
P4.1 Building Construction, P4.2 Building Construction, P4.1 Paving, P4.1 Architectural Coating, and P4.1 Finishing and Landscaping	***3***	***9***	***40***	***0***	***3***	***1***
P4.2 Building Construction 2029	***1***	***4***	***22***	***0***	***2***	***1***
P4.2 Building Construction 2030	***1***	***4***	***22***	***0***	***2***	***1***
P4.2 Building Construction, P4.2 Paving, P4.2 Architectural Coating, and P4.2 Finishing and Landscaping	***21***	***8***	***37***	***0***	***3***	***1***
MAX DAILY	**35**	**12**	**85**	**0**	**18**	**6**
Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

Unmitigated Construction LST Worksheet:

P1 Demolition (2027)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	3.89	4.88	0.09	0.09
Demolition	0.00	0.00	3.32	0.50
Onsite truck	0.00	0.00	0.00	0.00
Total	**3.89**	**4.88**	**3.41**	**0.59**

P1 Demolition Debris Onsite Reprocessing (2027)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	0.85	48.10	0.59	0.44
Demolition	0.00	0.00	3.32	0.50
Onsite truck	0.00	0.00	0.00	0.00
Total	**0.85**	**48.10**	**3.91**	**0.95**

P1 Site Preparation (2027)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	27.97	28.28	1.17	1.08
Dust From Material Movement	0.00	0.00	7.67	3.94
Onsite truck	0.02	0.01	1.07	0.11
Total	**28.00**	**28.29**	**9.91**	**5.13**

P2 Rough Grading (2027)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	25.58	27.28	1.04	0.96
Dust From Material Movement	0.00	0.00	3.59	1.43
Onsite truck	0.02	0.01	1.22	0.12
Total	**25.60**	**27.30**	**5.86**	**2.51**

P3 Fine Grading (2027)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	25.58	27.28	1.04	0.96
Dust From Material Movement	0.00	0.00	3.59	1.42
Onsite truck	0.03	0.01	1.22	0.12
Total	**25.61**	**27.30**	**5.86**	**2.51**

P3 Fine Grading (2028)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	24.33	27.17	0.99	0.91
Dust From Material Movement	0.00	0.00	3.59	1.42
Onsite truck	0.02	0.01	1.22	0.12
Total	**24.35**	**27.18**	**5.80**	**2.45**

P3 Utility Trenching (2027)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	0.00	0.00	0.00	0.00
Onsite truck	0.81	1.50	0.02	0.02
Total	**0.81**	**1.50**	**0.02**	**0.02**

P3 Utility Trenching (2028)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	0.79	1.50	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00
Total	**0.79**	**1.50**	**0.02**	**0.02**

P4.1 Building Construction (Senior Affordable Apartments) (2027)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	4.56	6.90	0.17	0.15
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**4.56**	**6.90**	**0.17**	**0.15**

P4.1 Building Construction (Senior Affordable Apartments) (2028)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	0.00	0.00	0.00	0.00
	Onsite truck	4.30	6.91	0.15	0.14
	Total	**4.30**	**6.91**	**0.15**	**0.14**

P4.1 Building Construction (Senior Affordable Apartments) (2029)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	4.11	6.89	0.14	0.13
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**4.11**	**6.89**	**0.14**	**0.13**

P4.1 Paving (2029)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	3.16	3.63	0.13	0.12
	Paving	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**3.16**	**3.63**	**0.13**	**0.12**

P4.1 Architectural Coating (2029)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	0.79	1.11	0.01	0.01
	Architectural Coating	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**0.79**	**1.11**	**0.01**	**0.01**

P4.1 Finishing and Landscaping (2029)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	0.78	1.50	0.02	0.02
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**0.78**	**1.50**	**0.02**	**0.02**

P4.2 Building Construction (Townhomes and Duet Homes) (2028)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	8.92	12.94	0.30	0.28
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**8.92**	**12.94**	**0.30**	**0.28**

P4.2 Building Construction (Townhomes and Duet Homes) (2029)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	8.58	12.90	0.28	0.25
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**8.58**	**12.90**	**0.28**	**0.25**

P4.2 Building Construction (Townhomes and Duet Homes) (2030)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	8.39	12.88	0.26	0.24
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**8.39**	**12.88**	**0.26**	**0.24**

P4.2 Paving (2030)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	6.28	9.90	0.22	0.20
	Paving	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**6.28**	**9.90**	**0.22**	**0.20**

P4.2 Architectural Coating (2030)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	0.78	1.11	0.01	0.01
	Architectural Coating	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**0.78**	**1.11**	**0.01**	**0.01**

P4.2 Finishing and Landscaping (2030)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	0.77	1.50	0.02	0.02
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**0.77**	**1.50**	**0.02**	**0.02**

	NOx	CO	PM10 Total	PM2.5 Total
P1 Demolition, P1 Demolition Debris Onsite Reprocessing, and Site Preparation	*33*	*81*	*17*	*7*
P2 Rough Grading	*26*	*27*	*6*	*3*
P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction 2027	*31*	*36*	*6*	*3*
P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction 2028	*29*	*36*	*6*	*3*
P4.1 Building Construction and P4.2 Building Construction 2028	*13*	*20*	*0*	*0*
P4.1 Building Construction and P4.2 Building Construction 2029	*13*	*20*	*0*	*0*
P4.1 Building Construction, P4.2 Building Construction, P4.1 Paving, P4.1 Architectural Coating, and P4.1 Finishing and Landscaping	*17*	*26*	*1*	*1*
P4.2 Building Construction 2029	*9*	*13*	*0*	*0*
P4.2 Building Construction 2030	*8*	*13*	*0*	*0*
P4.2 Building Construction, P4.2 Paving, P4.2 Architectural Coating, and P4.2 Finishing and Landscaping	*16*	*25*	*1*	*0*

Mitigated Construction LST Worksheet:

Mitigation: Super-Compliant VOC paint for all coating phases and Tier 4-Final Equipment

P1 Demolition (2027)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	3.16	4.71	0.01	0.01
	Demolition	0.00	0.00	3.32	0.50
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**3.16**	**4.71**	**3.33**	**0.51**

P1 Demolition Debris Onsite Reprocessing (2027)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	0.85	48.10	0.59	0.44
	Demolition	0.00	0.00	3.32	0.50
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**0.85**	**48.10**	**3.91**	**0.95**

P1 Site Preparation (2027)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	2.59	28.31	0.10	0.10
	Dust From Material Movement	0.00	0.00	7.67	3.94
	Onsite truck	0.02	0.01	1.07	0.11
	Total	**2.61**	**28.32**	**8.84**	**4.15**

P2 Rough Grading (2027)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	4.43	35.35	0.12	0.12
	Dust From Material Movement	0.00	0.00	3.59	1.43
	Onsite truck	0.02	0.01	1.22	0.12
	Total	**4.45**	**35.36**	**4.94**	**1.67**

P3 Fine Grading (2027)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	4.43	35.35	0.12	0.12
	Dust From Material Movement	0.00	0.00	3.59	1.42
	Onsite truck	0.03	0.01	1.22	0.12
	Total	**4.45**	**35.36**	**4.94**	**1.67**

P3 Fine Grading (2028)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	4.43	35.35	0.12	0.12
	Dust From Material Movement	0.00	0.00	3.59	1.42
	Onsite truck	0.02	0.01	1.22	0.12
	Total	**4.45**	**35.36**	**4.94**	**1.67**

P3 Utility Trenching (2027)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	1.27	1.71	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**1.27**	**1.71**	**0.00**	**0.00**

P3 Utility Trenching (2028)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	1.27	1.71	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**1.27**	**1.71**	**0.00**	**0.00**

P4.1 Building Construction (Senior Affordable Apartments) (2027)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	0.64	8.10	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00
Total	**0.64**	**8.10**	**0.02**	**0.02**

P4.1 Building Construction (Senior Affordable Apartments) (2028)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	0.64	8.10	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00
Total	**0.64**	**8.10**	**0.02**	**0.02**

P4.1 Building Construction (Senior Affordable Apartments) (2029)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	0.64	8.10	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00
Total	**0.64**	**8.10**	**0.02**	**0.02**

P4.1 Paving (2029)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	1.96	3.77	0.06	0.05
Paving	0.00	0.00	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00
Total	**1.96**	**3.77**	**0.06**	**0.05**

P4.1 Architectural Coating (2029)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	0.65	0.96	0.00	0.00
Architectural Coating	0.00	0.00	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00
Total	**0.65**	**0.96**	**0.00**	**0.00**

P4.1 Finishing and Landscaping (2029)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	1.27	1.71	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00
Total	**1.27**	**1.71**	**0.00**	**0.00**

P4.2 Building Construction (Townhomes and Duet Homes) (2028)

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	2.81	14.82	0.07	0.07
Onsite truck	0.00	0.00	0.00	0.00
Total	**2.81**	**14.82**	**0.07**	**0.07**

P4.2 Building Construction (Townhomes and Duet Homes) (2029)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	2.81	14.82	0.07	0.07
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**2.81**	**14.82**	**0.07**	**0.07**

P4.2 Building Construction (Townhomes and Duet Homes) (2030)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	2.81	14.82	0.07	0.07
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**2.81**	**14.82**	**0.07**	**0.07**

P4.2 Paving (2030)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	1.93	10.60	0.03	0.03
	Paving	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**1.93**	**10.60**	**0.03**	**0.03**

P4.2 Architectural Coating (2030)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	0.65	0.96	0.00	0.00
	Architectural Coating	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**0.65**	**0.96**	**0.00**	**0.00**

P4.2 Finishing and Landscaping (2030)					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	1.27	1.71	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	**1.27**	**1.71**	**0.00**	**0.00**

	NOx	CO	PM10 Total	PM2.5 Total
P1 Demolition, P1 Demolition Debris Onsite Reprocessing, and Site Preparation	*7*	*81*	*16*	*6*
P2 Rough Grading	*4*	*35*	*5*	*2*
P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction 2027	*6*	*45*	*5*	*2*
P3 Fine Grading, P3 Utility Trenching, and P4.1 Building Construction 2028	*6*	*45*	*5*	*2*
P4.1 Building Construction and P4.2 Building Construction 2028	*3*	*23*	*0*	*0*
P4.1 Building Construction and P4.2 Building Construction 2029	*3*	*23*	*0*	*0*
P4.1 Building Construction, P4.2 Building Construction, P4.1 Paving, P4.1 Architectural Coating, and P4.1 Finishing and Landscaping	*7*	*29*	*0*	*0*
P4.2 Building Construction 2029	*3*	*15*	*0*	*0*
P4.2 Building Construction 2030	*3*	*15*	*0*	*0*
P4.2 Building Construction, P4.2 Paving, P4.2 Architectural Coating, and P4.2 Finishing and Landscaping	*7*	*28*	*0*	*0*

Regional Operation Emissions Worksheet

[1] CalEEMod, Version 2022.1.

Existing Conditions (Year 2030)

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	3.80	1.80	35.00	0.08	9.40	2.40
Area	11.00	0.14	16.00	0.01	0.03	0.02
Energy	0.23	4.30	3.60	0.03	0.32	0.32
Total	**15.03**	**6.24**	**54.60**	**0.12**	**9.75**	**2.74**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	3.80	2.00	32.00	0.08	9.40	2.40
Area	8.40					
Energy	0.23	4.30	3.60	0.03	0.32	0.32
Total	**12.43**	**6.30**	**35.60**	**0.11**	**9.72**	**2.72**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	3.80	2.00	35.00	0.08	9.40	2.40
Area	11.00	0.14	16.00	0.01	0.03	0.02
Energy	0.23	4.30	3.60	0.03	0.32	0.32
Total	**15.03**	**6.30**	**54.60**	**0.12**	**9.75**	**2.74**

Proposed Project (Year 2030)

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	4.70	2.10	39.00	0.09	10.00	2.60
Area	18.00	0.15	16.00	0.01	0.01	0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total	**22.70**	**2.25**	**55.00**	**0.10**	**10.01**	**2.61**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	4.70	2.30	37.00	0.08	10.00	2.60
Area	16.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total	**20.70**	**2.30**	**37.00**	**0.08**	**10.00**	**2.60**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	4.70	2.30	39.00	0.09	10.00	2.60
Area	18.00	0.15	16.00	0.01	0.01	0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total	**22.70**	**2.30**	**55.00**	**0.10**	**10.01**	**2.61**
Net Difference	8	-4	0	0	0	0
Regional Thresholds (lb/day)	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

GHG Emissions Inventory

Proposed Project Buildout

Construction[1]

	Phase 1-3	Phase 4.1 (Affordable Site)	Phase 4.2 (Townhomes and Duet Site)	Total Proposed Project
	$MTCO_2e$	$MTCO_2e$	$MTCO_2e$	$MTCO_2e$
2027	1,133	58	NA	1,191
2028	309	228	415	952
2029	NA	184	612	796
2030	NA	NA	552	552
Total Construction	**1,442**	**469**	**1,579**	**3,491**
30-Year Amortization[2]	**48**	**16**	**53**	**116**

Notes:

[1] CalEEMod, Version 2022.1.

[2] Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD. 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2.

Operation[1]

	Existing Conditions (Year 2026)		Proposed Conditions (Year 2030)		Net Difference	
	Operations ($MTCO_2e$/Year)[2]	%	Operations ($MTCO_2e$/Year)[2]	%	Operations ($MTCO_2e$/Year)[2]	%
Mobile	1,418	45%	1,453	82%	35	-3%
Area	8	0%	5	0%	-3	0%
Energy	1,430	45%	123	7%	-1,307	95%
Water	145	5%	17	1%	-128	9%
Solid Waste	143	5%	66	4%	-77	6%
Refrigerants	16	1%	1	0%	-15	1%
30-Year Construction Amortization[3]	NA		116	7%		
	3,160	100%	**1,781**	100%	**-1,378**	100%
			South Coast AQMD Bright-Line Screening Threshold		**3,000**	
			Exceed Threshold?		**No**	

Notes:

[1] CalEEMod, Version 2022.1.

[2] MTCO2e=metric tons of carbon dioxide equivalent.

[3] Total construction emissions are amoritzed over 30 years per South Coast AQMD methodology.

CalEEMod Unmitigated and Mitigated Construction Model P1-3

5600 Beach Boulevard Residential Development Project, Entire Site Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

3. Construction Emissions Details

3.1. P1 Demolition (2027) - Unmitigated

3.2. P1 Demolition (2027) - Mitigated

3.3. P1 Demolition Debris Onsite Reprocessing (2027) - Unmitigated

3.4. P1 Demolition Debris Onsite Reprocessing (2027) - Mitigated

3.5. P1 Site Preparation (2027) - Unmitigated

3.6. P1 Site Preparation (2027) - Mitigated

3.7. P2 Rough Grading (2027) - Unmitigated

3.8. P2 Rough Grading (2027) - Mitigated

3.9. P3 Fine Grading (2027) - Unmitigated

3.10. P3 Fine Grading (2027) - Mitigated

3.11. P3 Fine Grading (2028) - Unmitigated

3.12. P3 Fine Grading (2028) - Mitigated

3.13. P3 Utility Trenching (2027) - Unmitigated

3.14. P3 Utility Trenching (2027) - Mitigated

3.15. P3 Utility Trenching (2028) - Unmitigated

3.16. P3 Utility Trenching (2028) - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

8. User Changes to Default Data

8.1. Justifications

8.4. Construction

8.4.6. Trips and VMT

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	5600 Beach Boulevard Residential Development Project, Entire Site
Construction Start Date	2/1/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	18.8000
Location	5600 Beach Blvd, Buena Park, CA 90621, USA
County	Orange
City	Buena Park
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5798
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.37

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
Parking Lot	13.7600	Acre	13.7600	0.00000	0.00000	0.00000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	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.	38.8073	37.5631	38.3241	85.2395	0.09128	1.91201	17.0607	18.9727	1.66723	5.50554	7.17277	—	11,208.2	11,208.2	0.60135	0.81863	10.6336	11,477.8
Mit.	35.2508	34.6735	12.2060	85.1025	0.09128	0.75705	17.0607	17.8177	0.61356	5.50554	6.11910	—	11,208.2	11,208.2	0.60135	0.81863	10.6336	11,477.8
% Reduced	9%	8%	68%	< 0.5%	—	60%	—	6%	63%	—	15%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	38.8013	37.5565	38.5558	85.0585	0.09128	1.91201	17.0607	18.9727	1.66723	5.50554	7.17277	—	11,191.5	11,191.5	0.60155	0.81863	0.27562	11,450.8
Mit.	35.2448	34.6669	12.4377	84.9215	0.09128	0.75705	17.0607	17.8177	0.61356	5.50554	6.11910	—	11,191.5	11,191.5	0.60155	0.81863	0.27562	11,450.8
% Reduced	9%	8%	68%	< 0.5%	—	60%	—	6%	63%	—	15%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.7643	10.1450	21.4061	32.8033	0.05559	0.90696	6.42628	7.33324	0.81383	2.05672	2.87055	—	6,716.08	6,716.08	0.33813	0.39749	2.24059	6,845.23
Mit.	8.71397	8.48965	6.42568	36.2060	0.05559	0.24472	6.42628	6.67100	0.21091	2.05672	2.26763	—	6,716.08	6,716.08	0.33813	0.39749	2.24059	6,845.23
% Reduced	19%	16%	70%	-10%	—	73%	—	9%	74%	—	21%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.96448	1.85146	3.90662	5.98661	0.01015	0.16552	1.17280	1.33832	0.14852	0.37535	0.52387	—	1,111.92	1,111.92	0.05598	0.06581	0.37096	1,133.31
Mit.	1.59030	1.54936	1.17269	6.60759	0.01015	0.04466	1.17280	1.21746	0.03849	0.37535	0.41384	—	1,111.92	1,111.92	0.05598	0.06581	0.37096	1,133.31
% Reduced	19%	16%	70%	-10%	—	73%	—	9%	74%	—	21%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	38.8073	37.5631	38.3241	85.2395	0.09128	1.91201	17.0607	18.9727	1.66723	5.50554	7.17277	—	11,208.2	11,208.2	0.60135	0.81863	10.6336	11,477.8
2028	3.62063	3.01375	25.8805	30.0752	0.06846	1.01026	5.30501	6.31527	0.92986	1.67069	2.60056	—	7,829.86	7,829.86	0.31696	0.15559	2.35927	7,886.51
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	38.8013	37.5565	38.5558	85.0585	0.09128	1.91201	17.0607	18.9727	1.66723	5.50554	7.17277	—	11,191.5	11,191.5	0.60155	0.81863	0.27562	11,450.8
2028	3.61905	3.01317	25.9215	29.9351	0.06846	1.01026	5.30501	6.31527	0.92986	1.67069	2.60056	—	7,816.63	7,816.63	0.31796	0.16477	0.06120	7,873.74
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	10.7643	10.1450	21.4061	32.8033	0.05559	0.90696	6.42628	7.33324	0.81383	2.05672	2.87055	—	6,716.08	6,716.08	0.33813	0.39749	2.24059	6,845.23
2028	0.85721	0.71374	6.13795	7.09703	0.01621	0.23922	1.23993	1.47915	0.22018	0.39379	0.61397	—	1,851.72	1,851.72	0.07529	0.03902	0.24144	1,865.47
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.96448	1.85146	3.90662	5.98661	0.01015	0.16552	1.17280	1.33832	0.14852	0.37535	0.52387	—	1,111.92	1,111.92	0.05598	0.06581	0.37096	1,133.31
2028	0.15644	0.13026	1.12018	1.29521	0.00296	0.04366	0.22629	0.26995	0.04018	0.07187	0.11205	—	306.573	306.573	0.01247	0.00646	0.03997	308.850

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	35.2508	34.6735	12.2060	85.1025	0.09128	0.75705	17.0607	17.8177	0.61356	5.50554	6.11910	—	11,208.2	11,208.2	0.60135	0.81863	10.6336	11,477.8
2028	0.80693	0.75823	6.45361	38.4649	0.06846	0.13395	5.30501	5.43896	0.13395	1.67069	1.80464	—	7,829.86	7,829.86	0.31696	0.15559	2.35927	7,886.51
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	35.2448	34.6669	12.4377	84.9215	0.09128	0.75705	17.0607	17.8177	0.61356	5.50554	6.11910	—	11,191.5	11,191.5	0.60155	0.81863	0.27562	11,450.8
2028	0.80535	0.75765	6.49460	38.3247	0.06846	0.13395	5.30501	5.43896	0.13395	1.67069	1.80464	—	7,816.63	7,816.63	0.31796	0.16477	0.06120	7,873.74
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	8.71397	8.48965	6.42568	36.2060	0.05559	0.24472	6.42628	6.67100	0.21091	2.05672	2.26763	—	6,716.08	6,716.08	0.33813	0.39749	2.24059	6,845.23
2028	0.19095	0.17965	1.53785	9.08363	0.01621	0.03172	1.23993	1.27165	0.03172	0.39379	0.42550	—	1,851.72	1,851.72	0.07529	0.03902	0.24144	1,865.47
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.59030	1.54936	1.17269	6.60759	0.01015	0.04466	1.17280	1.21746	0.03849	0.37535	0.41384	—	1,111.92	1,111.92	0.05598	0.06581	0.37096	1,133.31
2028	0.03485	0.03279	0.28066	1.65776	0.00296	0.00579	0.22629	0.23208	0.00579	0.07187	0.07765	—	306.573	306.573	0.01247	0.00646	0.03997	308.850

3. Construction Emissions Details

3.1. P1 Demolition (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	0.52609	0.43929	3.89423	4.87510	0.00708	0.09431	—	0.09431	0.08677	—	0.08677	—	669.188	669.188	0.02715	0.00543	—	671.485

Demoliti	—	—	—	—	—	—	3.31997	3.31997	—	0.50274	0.50274	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52609	0.43929	3.89423	4.87510	0.00708	0.09431	—	0.09431	0.08677	—	0.08677	—	669.188	669.188	0.02715	0.00543	—	671.485
Demolition	—	—	—	—	—	—	3.31997	3.31997	—	0.50274	0.50274	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12396	0.10350	0.91755	1.14865	0.00167	0.02222	—	0.02222	0.02044	—	0.02044	—	157.672	157.672	0.00640	0.00128	—	158.213
Demolition	—	—	—	—	—	—	0.78224	0.78224	—	0.11845	0.11845	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02262	0.01889	0.16745	0.20963	0.00030	0.00406	—	0.00406	0.00373	—	0.00373	—	26.1044	26.1044	0.00106	0.00021	—	26.1939
Demolition	—	—	—	—	—	—	0.14276	0.14276	—	0.02162	0.02162	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03329	0.02855	0.02998	0.49450	0.00000	0.00000	0.13071	0.13071	0.00000	0.03064	0.03064	—	128.024	128.024	0.00132	0.00474	0.40593	129.875
Vendor	0.00487	0.00129	0.06139	0.03049	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	61.5694	61.5694	0.00313	0.00840	0.14728	64.2994
Hauling	0.38404	0.06356	4.85054	2.16631	0.02840	0.05409	1.11015	1.16424	0.05409	0.31134	0.36543	—	4,121.76	4,121.76	0.31778	0.66531	7.85092	4,335.81
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03329	0.02833	0.03064	0.42527	0.00000	0.00000	0.13071	0.13071	0.00000	0.03064	0.03064	—	121.843	121.843	0.00154	0.00474	0.01056	123.305
Vendor	0.00482	0.00124	0.06399	0.03119	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	61.6018	61.6018	0.00309	0.00840	0.00381	64.1871
Hauling	0.37863	0.05815	5.05202	2.18524	0.02840	0.05409	1.11015	1.16424	0.05409	0.31134	0.36543	—	4,123.30	4,123.30	0.31778	0.66531	0.20343	4,329.71
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00779	0.00667	0.00813	0.10449	0.00000	0.00000	0.03043	0.03043	0.00000	0.00713	0.00713	—	29.1003	29.1003	0.00036	0.00112	0.04136	29.4835
Vendor	0.00115	0.00030	0.01517	0.00726	0.00011	0.00011	0.00399	0.00410	0.00011	0.00110	0.00121	—	14.5100	14.5100	0.00073	0.00198	0.01496	15.1332
Hauling	0.09017	0.01434	1.19767	0.51233	0.00669	0.01274	0.25910	0.27185	0.01274	0.07274	0.08549	—	971.306	971.306	0.07487	0.15676	0.79824	1,020.69
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00142	0.00122	0.00148	0.01907	0.00000	0.00000	0.00555	0.00555	0.00000	0.00130	0.00130	—	4.81788	4.81788	0.00006	0.00018	0.00685	4.88133
Vendor	0.00021	0.00006	0.00277	0.00132	0.00002	0.00002	0.00073	0.00075	0.00002	0.00020	0.00022	—	2.40229	2.40229	0.00012	0.00033	0.00248	2.50547
Hauling	0.01646	0.00262	0.21857	0.09350	0.00122	0.00233	0.04729	0.04961	0.00233	0.01328	0.01560	—	160.811	160.811	0.01240	0.02595	0.13216	168.987

3.2. P1 Demolition (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 Equipm	0.10338	0.10338	3.15892	4.70966	0.00708	0.01149	—	0.01149	0.01149	—	0.01149	—	669.188	669.188	0.02715	0.00543	—	671.485
Demolition	—	—	—	—	—	—	3.31997	3.31997	—	0.50274	0.50274	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10338	0.10338	3.15892	4.70966	0.00708	0.01149	—	0.01149	0.01149	—	0.01149	—	669.188	669.188	0.02715	0.00543	—	671.485
Demolition	—	—	—	—	—	—	3.31997	3.31997	—	0.50274	0.50274	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02436	0.02436	0.74429	1.10967	0.00167	0.00271	—	0.00271	0.00271	—	0.00271	—	157.672	157.672	0.00640	0.00128	—	158.213
Demolition	—	—	—	—	—	—	0.78224	0.78224	—	0.11845	0.11845	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00445	0.00445	0.13583	0.20252	0.00030	0.00049	—	0.00049	0.00049	—	0.00049	—	26.1044	26.1044	0.00106	0.00021	—	26.1939
Demolition	—	—	—	—	—	—	0.14276	0.14276	—	0.02162	0.02162	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03329	0.02855	0.02998	0.49450	0.00000	0.00000	0.13071	0.13071	0.00000	0.03064	0.03064	—	128.024	128.024	0.00132	0.00474	0.40593	129.875
Vendor	0.00487	0.00129	0.06139	0.03049	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	61.5694	61.5694	0.00313	0.00840	0.14728	64.2994
Hauling	0.38404	0.06356	4.85054	2.16631	0.02840	0.05409	1.11015	1.16424	0.05409	0.31134	0.36543	—	4,121.76	4,121.76	0.31778	0.66531	7.85092	4,335.81
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03329	0.02833	0.03064	0.42527	0.00000	0.00000	0.13071	0.13071	0.00000	0.03064	0.03064	—	121.843	121.843	0.00154	0.00474	0.01056	123.305
Vendor	0.00482	0.00124	0.06399	0.03119	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	61.6018	61.6018	0.00309	0.00840	0.00381	64.1871
Hauling	0.37863	0.05815	5.05202	2.18524	0.02840	0.05409	1.11015	1.16424	0.05409	0.31134	0.36543	—	4,123.30	4,123.30	0.31778	0.66531	0.20343	4,329.71
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00779	0.00667	0.00813	0.10449	0.00000	0.00000	0.03043	0.03043	0.00000	0.00713	0.00713	—	29.1003	29.1003	0.00036	0.00112	0.04136	29.4835
Vendor	0.00115	0.00030	0.01517	0.00726	0.00011	0.00011	0.00399	0.00410	0.00011	0.00110	0.00121	—	14.5100	14.5100	0.00073	0.00198	0.01496	15.1332
Hauling	0.09017	0.01434	1.19767	0.51233	0.00669	0.01274	0.25910	0.27185	0.01274	0.07274	0.08549	—	971.306	971.306	0.07487	0.15676	0.79824	1,020.69
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00142	0.00122	0.00148	0.01907	0.00000	0.00000	0.00555	0.00555	0.00000	0.00130	0.00130	—	4.81788	4.81788	0.00006	0.00018	0.00685	4.88133
Vendor	0.00021	0.00006	0.00277	0.00132	0.00002	0.00002	0.00073	0.00075	0.00002	0.00020	0.00022	—	2.40229	2.40229	0.00012	0.00033	0.00248	2.50547
Hauling	0.01646	0.00262	0.21857	0.09350	0.00122	0.00233	0.04729	0.04961	0.00233	0.01328	0.01560	—	160.811	160.811	0.01240	0.02595	0.13216	168.987

3.3. P1 Demolition Debris Onsite Reprocessing (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	34.1123	33.9087	0.84946	48.1014	0.00209	0.58702	—	0.58702	0.44353	—	0.44353	—	77.8060	77.8060	0.00327	0.00065	—	78.0828
Demolition	—	—	—	—	—	—	3.31997	3.31997	—	0.50274	0.50274	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	34.1123	33.9087	0.84946	48.1014	0.00209	0.58702	—	0.58702	0.44353	—	0.44353	—	77.8060	77.8060	0.00327	0.00065	—	78.0828
Demolition	—	—	—	—	—	—	3.31997	3.31997	—	0.50274	0.50274	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.03741	7.98945	0.20015	11.3335	0.00049	0.13831	—	0.13831	0.10450	—	0.10450	—	18.3324	18.3324	0.00077	0.00015	—	18.3976
Demolition	—	—	—	—	—	—	0.78224	0.78224	—	0.11845	0.11845	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.46683	1.45807	0.03653	2.06836	0.00009	0.02524	—	0.02524	0.01907	—	0.01907	—	3.03513	3.03513	0.00013	0.00003	—	3.04593
Demolition	—	—	—	—	—	—	0.14276	0.14276	—	0.02162	0.02162	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00832	0.00714	0.00750	0.12362	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	32.0059	32.0059	0.00033	0.00118	0.10148	32.4688
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00832	0.00708	0.00766	0.10632	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	30.4607	30.4607	0.00039	0.00118	0.00264	30.8262
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00195	0.00167	0.00203	0.02612	0.00000	0.00000	0.00761	0.00761	0.00000	0.00178	0.00178	—	7.27507	7.27507	0.00009	0.00028	0.01034	7.37088
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00036	0.00030	0.00037	0.00477	0.00000	0.00000	0.00139	0.00139	0.00000	0.00033	0.00033	—	1.20447	1.20447	0.00002	0.00005	0.00171	1.22033
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. P1 Demolition Debris Onsite Reprocessing (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	34.1123	33.9087	0.84946	48.1014	0.00209	0.58702	—	0.58702	0.44353	—	0.44353	—	77.8060	77.8060	0.00327	0.00065	—	78.0828
Demolition	—	—	—	—	—	—	3.31997	3.31997	—	0.50274	0.50274	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	34.1123	33.9087	0.84946	48.1014	0.00209	0.58702	—	0.58702	0.44353	—	0.44353	—	77.8060	77.8060	0.00327	0.00065	—	78.0828
Demolition	—	—	—	—	—	—	3.31997	3.31997	—	0.50274	0.50274	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.03741	7.98945	0.20015	11.3335	0.00049	0.13831	—	0.13831	0.10450	—	0.10450	—	18.3324	18.3324	0.00077	0.00015	—	18.3976
Demolition	—	—	—	—	—	—	0.78224	0.78224	—	0.11845	0.11845	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.46683	1.45807	0.03653	2.06836	0.00009	0.02524	—	0.02524	0.01907	—	0.01907	—	3.03513	3.03513	0.00013	0.00003	—	3.04593
Demolition	—	—	—	—	—	—	0.14276	0.14276	—	0.02162	0.02162	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00832	0.00714	0.00750	0.12362	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	32.0059	32.0059	0.00033	0.00118	0.10148	32.4688
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00832	0.00708	0.00766	0.10632	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	30.4607	30.4607	0.00039	0.00118	0.00264	30.8262
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00195	0.00167	0.00203	0.02612	0.00000	0.00000	0.00761	0.00761	0.00000	0.00178	0.00178	—	7.27507	7.27507	0.00009	0.00028	0.01034	7.37088
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00036	0.00030	0.00037	0.00477	0.00000	0.00000	0.00139	0.00139	0.00000	0.00033	0.00033	—	1.20447	1.20447	0.00002	0.00005	0.00171	1.22033
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. P1 Site Preparation (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	3.63178	3.05170	27.9724	28.2794	0.04891	1.17173	—	1.17173	1.07799	—	1.07799	—	5,297.82	5,297.82	0.21490	0.04298	—	5,316.00
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00211	0.00066	0.02288	0.01382	0.00009	0.00013	1.07256	1.07269	0.00013	0.10721	0.10734	—	11.0557	11.0557	0.00141	0.00179	0.01850	11.6440
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63178	3.05170	27.9724	28.2794	0.04891	1.17173	—	1.17173	1.07799	—	1.07799	—	5,297.82	5,297.82	0.21490	0.04298	—	5,316.00
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00202	0.00057	0.02390	0.01413	0.00009	0.00013	1.07256	1.07269	0.00013	0.10721	0.10734	—	11.0809	11.0809	0.00141	0.00179	0.00048	11.6511
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85571	0.71903	6.59076	6.66308	0.01152	0.27608	—	0.27608	0.25399	—	0.25399	—	1,248.25	1,248.25	0.05063	0.01013	—	1,252.54
Dust From Material Movement	—	—	—	—	—	—	1.80629	1.80629	—	0.92832	0.92832	—	—	—	—	—	—	—
Onsite truck	0.00049	0.00014	0.00557	0.00329	0.00002	0.00003	0.23971	0.23974	0.00003	0.02396	0.02399	—	2.60740	2.60740	0.00033	0.00042	0.00188	2.74352
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15617	0.13122	1.20281	1.21601	0.00210	0.05038	—	0.05038	0.04635	—	0.04635	—	206.663	206.663	0.00838	0.00168	—	207.372

Dust From Material Movement	—	—	—	—	—	—	0.32965	0.32965	—	0.16942	0.16942	—	—	—	—	—	—	—
Onsite truck	0.00009	0.00003	0.00102	0.00060	< 0.000005	0.00001	0.04375	0.04375	0.00001	0.00437	0.00438	—	0.43169	0.43169	0.00005	0.00007	0.00031	0.45422
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05826	0.04996	0.05247	0.86537	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	224.042	224.042	0.00231	0.00829	0.71038	227.282
Vendor	0.04624	0.01223	0.58325	0.28961	0.00427	0.00427	0.16256	0.16683	0.00427	0.04491	0.04919	—	584.910	584.910	0.02974	0.07984	1.39913	610.844
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05826	0.04958	0.05363	0.74423	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	213.225	213.225	0.00270	0.00829	0.01847	215.783
Vendor	0.04583	0.01181	0.60788	0.29631	0.00427	0.00427	0.16256	0.16683	0.00427	0.04491	0.04919	—	585.217	585.217	0.02932	0.07984	0.03623	609.778
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01364	0.01168	0.01423	0.18285	0.00000	0.00000	0.05324	0.05324	0.00000	0.01247	0.01247	—	50.9255	50.9255	0.00064	0.00195	0.07239	51.5962
Vendor	0.01090	0.00288	0.14415	0.06893	0.00101	0.00101	0.03791	0.03892	0.00101	0.01048	0.01149	—	137.845	137.845	0.00691	0.01881	0.14208	143.765
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00249	0.00213	0.00260	0.03337	0.00000	0.00000	0.00972	0.00972	0.00000	0.00228	0.00228	—	8.43129	8.43129	0.00011	0.00032	0.01198	8.54233
Vendor	0.00199	0.00053	0.02631	0.01258	0.00018	0.00018	0.00692	0.00710	0.00018	0.00191	0.00210	—	22.8218	22.8218	0.00114	0.00311	0.02352	23.8020
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. P1 Site Preparation (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	0.49800	0.49800	2.58959	28.3078	0.04891	0.09960	—	0.09960	0.09960	—	0.09960	—	5,297.82	5,297.82	0.21490	0.04298	—	5,316.00
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00211	0.00066	0.02288	0.01382	0.00009	0.00013	1.07256	1.07269	0.00013	0.10721	0.10734	—	11.0557	11.0557	0.00141	0.00179	0.01850	11.6440
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49800	0.49800	2.58959	28.3078	0.04891	0.09960	—	0.09960	0.09960	—	0.09960	—	5,297.82	5,297.82	0.21490	0.04298	—	5,316.00
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00202	0.00057	0.02390	0.01413	0.00009	0.00013	1.07256	1.07269	0.00013	0.10721	0.10734	—	11.0809	11.0809	0.00141	0.00179	0.00048	11.6511
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11734	0.11734	0.61015	6.66978	0.01152	0.02347	—	0.02347	0.02347	—	0.02347	—	1,248.25	1,248.25	0.05063	0.01013	—	1,252.54
Dust From Material Movement	—	—	—	—	—	—	1.80629	1.80629	—	0.92832	0.92832	—	—	—	—	—	—	—

Onsite truck	0.00049	0.00014	0.00557	0.00329	0.00002	0.00003	0.23971	0.23974	0.00003	0.02396	0.02399	—	2.60740	2.60740	0.00033	0.00042	0.00188	2.74352
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02141	0.02141	0.11135	1.21723	0.00210	0.00428	—	0.00428	0.00428	—	0.00428	—	206.663	206.663	0.00838	0.00168	—	207.372
Dust From Material Movement	—	—	—	—	—	—	0.32965	0.32965	—	0.16942	0.16942	—	—	—	—	—	—	—
Onsite truck	0.00009	0.00003	0.00102	0.00060	< 0.000005	0.00001	0.04375	0.04375	0.00001	0.00437	0.00438	—	0.43169	0.43169	0.00005	0.00007	0.00031	0.45422
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05826	0.04996	0.05247	0.86537	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	224.042	224.042	0.00231	0.00829	0.71038	227.282
Vendor	0.04624	0.01223	0.58325	0.28961	0.00427	0.00427	0.16256	0.16683	0.00427	0.04491	0.04919	—	584.910	584.910	0.02974	0.07984	1.39913	610.844
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05826	0.04958	0.05363	0.74423	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	213.225	213.225	0.00270	0.00829	0.01847	215.783
Vendor	0.04583	0.01181	0.60788	0.29631	0.00427	0.00427	0.16256	0.16683	0.00427	0.04491	0.04919	—	585.217	585.217	0.02932	0.07984	0.03623	609.778
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01364	0.01168	0.01423	0.18285	0.00000	0.00000	0.05324	0.05324	0.00000	0.01247	0.01247	—	50.9255	50.9255	0.00064	0.00195	0.07239	51.5962
Vendor	0.01090	0.00288	0.14415	0.06893	0.00101	0.00101	0.03791	0.03892	0.00101	0.01048	0.01149	—	137.845	137.845	0.00691	0.01881	0.14208	143.765
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00249	0.00213	0.00260	0.03337	0.00000	0.00000	0.00972	0.00972	0.00000	0.00228	0.00228	—	8.43129	8.43129	0.00011	0.00032	0.01198	8.54233

Vendor	0.00199	0.00053	0.02631	0.01258	0.00018	0.00018	0.00692	0.00710	0.00018	0.00191	0.00210	—	22.8218	22.8218	0.00114	0.00311	0.02352	23.8020
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. P2 Rough Grading (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	3.50534	2.94546	25.5801	27.2816	0.06093	1.04307	—	1.04307	0.95962	—	0.95962	—	6,598.08	6,598.08	0.26765	0.05353	—	6,620.72
Dust From Material Movement	—	—	—	—	—	—	3.59498	3.59498	—	1.42581	1.42581	—	—	—	—	—	—	—
Onsite truck	0.00221	0.00067	0.02422	0.01433	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.4010	12.4010	0.00150	0.00201	0.02112	13.0588
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84512	0.71014	6.16726	6.57749	0.01469	0.25148	—	0.25148	0.23136	—	0.23136	—	1,590.77	1,590.77	0.06453	0.01291	—	1,596.23
Dust From Material Movement	—	—	—	—	—	—	0.86673	0.86673	—	0.34376	0.34376	—	—	—	—	—	—	—
Onsite truck	0.00053	0.00015	0.00604	0.00349	0.00002	0.00004	0.28008	0.28011	0.00004	0.02800	0.02803	—	2.99239	2.99239	0.00036	0.00048	0.00220	3.14808

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15424	0.12960	1.12552	1.20039	0.00268	0.04589	—	0.04589	0.04222	—	0.04222	—	263.370	263.370	0.01068	0.00214	—	264.274
Dust From Material Movement	—	—	—	—	—	—	0.15818	0.15818	—	0.06274	0.06274	—	—	—	—	—	—	—
Onsite truck	0.00010	0.00003	0.00110	0.00064	< 0.000005	0.00001	0.05111	0.05112	0.00001	0.00511	0.00512	—	0.49542	0.49542	0.00006	0.00008	0.00036	0.52120
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06658	0.05710	0.05997	0.98899	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	256.048	256.048	0.00265	0.00948	0.81186	259.751
Vendor	0.05598	0.01481	0.70603	0.35058	0.00517	0.00517	0.19679	0.20196	0.00517	0.05437	0.05954	—	708.048	708.048	0.03600	0.09665	1.69369	739.443
Hauling	0.32551	0.05387	4.11125	1.83614	0.02407	0.04585	0.94095	0.98679	0.04585	0.26389	0.30974	—	3,493.55	3,493.55	0.26935	0.56391	6.65434	3,674.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01595	0.01366	0.01664	0.21383	0.00000	0.00000	0.06227	0.06227	0.00000	0.01458	0.01458	—	59.5540	59.5540	0.00074	0.00229	0.08465	60.3384
Vendor	0.01350	0.00357	0.17856	0.08538	0.00125	0.00125	0.04696	0.04821	0.00125	0.01299	0.01423	—	170.745	170.745	0.00856	0.02330	0.17600	178.079
Hauling	0.07820	0.01243	1.03874	0.44434	0.00580	0.01105	0.22472	0.23577	0.01105	0.06309	0.07414	—	842.413	842.413	0.06494	0.13596	0.69231	885.243
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00291	0.00249	0.00304	0.03902	0.00000	0.00000	0.01136	0.01136	0.00000	0.00266	0.00266	—	9.85985	9.85985	0.00012	0.00038	0.01401	9.98971
Vendor	0.00246	0.00065	0.03259	0.01558	0.00023	0.00023	0.00857	0.00880	0.00023	0.00237	0.00260	—	28.2689	28.2689	0.00142	0.00386	0.02914	29.4830
Hauling	0.01427	0.00227	0.18957	0.08109	0.00106	0.00202	0.04101	0.04303	0.00202	0.01151	0.01353	—	139.471	139.471	0.01075	0.02251	0.11462	146.562

3.8. P2 Rough Grading (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	0.63931	0.63931	4.42560	35.3475	0.06093	0.12400	—	0.12400	0.12400	—	0.12400	—	6,598.08	6,598.08	0.26765	0.05353	—	6,620.72
Dust From Material Movement	—	—	—	—	—	—	3.59498	3.59498	—	1.42581	1.42581	—	—	—	—	—	—	—
Onsite truck	0.00221	0.00067	0.02422	0.01433	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.4010	12.4010	0.00150	0.00201	0.02112	13.0588
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15414	0.15414	1.06699	8.52215	0.01469	0.02990	—	0.02990	0.02990	—	0.02990	—	1,590.77	1,590.77	0.06453	0.01291	—	1,596.23
Dust From Material Movement	—	—	—	—	—	—	0.86673	0.86673	—	0.34376	0.34376	—	—	—	—	—	—	—
Onsite truck	0.00053	0.00015	0.00604	0.00349	0.00002	0.00004	0.28008	0.28011	0.00004	0.02800	0.02803	—	2.99239	2.99239	0.00036	0.00048	0.00220	3.14808
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02813	0.02813	0.19473	1.55529	0.00268	0.00546	—	0.00546	0.00546	—	0.00546	—	263.370	263.370	0.01068	0.00214	—	264.274

Dust From Material Movement	—	—	—	—	—	—	0.15818	0.15818	—	0.06274	0.06274	—	—	—	—	—	—	—
Onsite truck	0.00010	0.00003	0.00110	0.00064	< 0.000005	0.00001	0.05111	0.05112	0.00001	0.00511	0.00512	—	0.49542	0.49542	0.00006	0.00008	0.00036	0.52120
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06658	0.05710	0.05997	0.98899	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	256.048	256.048	0.00265	0.00948	0.81186	259.751
Vendor	0.05598	0.01481	0.70603	0.35058	0.00517	0.00517	0.19679	0.20196	0.00517	0.05437	0.05954	—	708.048	708.048	0.03600	0.09665	1.69369	739.443
Hauling	0.32551	0.05387	4.11125	1.83614	0.02407	0.04585	0.94095	0.98679	0.04585	0.26389	0.30974	—	3,493.55	3,493.55	0.26935	0.56391	6.65434	3,674.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01595	0.01366	0.01664	0.21383	0.00000	0.00000	0.06227	0.06227	0.00000	0.01458	0.01458	—	59.5540	59.5540	0.00074	0.00229	0.08465	60.3384
Vendor	0.01350	0.00357	0.17856	0.08538	0.00125	0.00125	0.04696	0.04821	0.00125	0.01299	0.01423	—	170.745	170.745	0.00856	0.02330	0.17600	178.079
Hauling	0.07820	0.01243	1.03874	0.44434	0.00580	0.01105	0.22472	0.23577	0.01105	0.06309	0.07414	—	842.413	842.413	0.06494	0.13596	0.69231	885.243
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00291	0.00249	0.00304	0.03902	0.00000	0.00000	0.01136	0.01136	0.00000	0.00266	0.00266	—	9.85985	9.85985	0.00012	0.00038	0.01401	9.98971
Vendor	0.00246	0.00065	0.03259	0.01558	0.00023	0.00023	0.00857	0.00880	0.00023	0.00237	0.00260	—	28.2689	28.2689	0.00142	0.00386	0.02914	29.4830
Hauling	0.01427	0.00227	0.18957	0.08109	0.00106	0.00202	0.04101	0.04303	0.00202	0.01151	0.01353	—	139.471	139.471	0.01075	0.02251	0.11462	146.562

3.9. P3 Fine Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.50534	2.94546	25.5801	27.2816	0.06093	1.04307	—	1.04307	0.95962	—	0.95962	—	6,598.08	6,598.08	0.26765	0.05353	—	6,620.72
Dust From Material Movement	—	—	—	—	—	—	3.58940	3.58940	—	1.42496	1.42496	—	—	—	—	—	—	—
Onsite truck	0.00212	0.00058	0.02530	0.01464	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.4262	12.4262	0.00150	0.00201	0.00055	13.0634
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63110	0.53030	4.60542	4.91176	0.01097	0.18779	—	0.18779	0.17277	—	0.17277	—	1,187.91	1,187.91	0.04819	0.00964	—	1,191.99
Dust From Material Movement	—	—	—	—	—	—	0.64623	0.64623	—	0.25655	0.25655	—	—	—	—	—	—	—
Onsite truck	0.00039	0.00011	0.00451	0.00260	0.00002	0.00003	0.20915	0.20918	0.00003	0.02091	0.02093	—	2.23458	2.23458	0.00027	0.00036	0.00164	2.35084
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11518	0.09678	0.84049	0.89640	0.00200	0.03427	—	0.03427	0.03153	—	0.03153	—	196.672	196.672	0.00798	0.00160	—	197.347
Dust From Material Movement	—	—	—	—	—	—	0.11794	0.11794	—	0.04682	0.04682	—	—	—	—	—	—	—

Onsite truck	0.00007	0.00002	0.00082	0.00048	< 0.000005	< 0.000005	0.03817	0.03817	< 0.000005	0.00382	0.00382	—	0.36996	0.36996	0.00004	0.00006	0.00027	0.38921
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06658	0.05666	0.06129	0.85054	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	243.686	243.686	0.00309	0.00948	0.02111	246.609
Vendor	0.05547	0.01430	0.73585	0.35870	0.00517	0.00517	0.19679	0.20196	0.00517	0.05437	0.05954	—	708.420	708.420	0.03549	0.09665	0.04386	738.152
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01191	0.01020	0.01242	0.15968	0.00000	0.00000	0.04650	0.04650	0.00000	0.01089	0.01089	—	44.4722	44.4722	0.00056	0.00171	0.06321	45.0579
Vendor	0.01008	0.00267	0.13334	0.06376	0.00093	0.00093	0.03507	0.03600	0.00093	0.00970	0.01063	—	127.505	127.505	0.00639	0.01740	0.13143	132.981
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00217	0.00186	0.00227	0.02914	0.00000	0.00000	0.00849	0.00849	0.00000	0.00199	0.00199	—	7.36287	7.36287	0.00009	0.00028	0.01047	7.45985
Vendor	0.00184	0.00049	0.02433	0.01164	0.00017	0.00017	0.00640	0.00657	0.00017	0.00177	0.00194	—	21.1099	21.1099	0.00106	0.00288	0.02176	22.0165
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10. P3 Fine Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.63931	0.63931	4.42560	35.3475	0.06093	0.12400	—	0.12400	0.12400	—	0.12400	—	6,598.08	6,598.08	0.26765	0.05353	—	6,620.72
Dust From Material Movement	—	—	—	—	—	—	3.58940	3.58940	—	1.42496	1.42496	—	—	—	—	—	—	—
Onsite truck	0.00212	0.00058	0.02530	0.01464	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.4262	12.4262	0.00150	0.00201	0.00055	13.0634
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.11510	0.11510	0.79678	6.36394	0.01097	0.02233	—	0.02233	0.02233	—	0.02233	—	1,187.91	1,187.91	0.04819	0.00964	—	1,191.99
Dust From Material Movement	—	—	—	—	—	—	0.64623	0.64623	—	0.25655	0.25655	—	—	—	—	—	—	—
Onsite truck	0.00039	0.00011	0.00451	0.00260	0.00002	0.00003	0.20915	0.20918	0.00003	0.02091	0.02093	—	2.23458	2.23458	0.00027	0.00036	0.00164	2.35084
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02101	0.02101	0.14541	1.16142	0.00200	0.00407	—	0.00407	0.00407	—	0.00407	—	196.672	196.672	0.00798	0.00160	—	197.347
Dust From Material Movement	—	—	—	—	—	—	0.11794	0.11794	—	0.04682	0.04682	—	—	—	—	—	—	—
Onsite truck	0.00007	0.00002	0.00082	0.00048	< 0.000005	< 0.000005	0.03817	0.03817	< 0.000005	0.00382	0.00382	—	0.36996	0.36996	0.00004	0.00006	0.00027	0.38921
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06658	0.05666	0.06129	0.85054	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	243.686	243.686	0.00309	0.00948	0.02111	246.609
Vendor	0.05547	0.01430	0.73585	0.35870	0.00517	0.00517	0.19679	0.20196	0.00517	0.05437	0.05954	—	708.420	708.420	0.03549	0.09665	0.04386	738.152
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01191	0.01020	0.01242	0.15968	0.00000	0.00000	0.04650	0.04650	0.00000	0.01089	0.01089	—	44.4722	44.4722	0.00056	0.00171	0.06321	45.0579
Vendor	0.01008	0.00267	0.13334	0.06376	0.00093	0.00093	0.03507	0.03600	0.00093	0.00970	0.01063	—	127.505	127.505	0.00639	0.01740	0.13143	132.981
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00217	0.00186	0.00227	0.02914	0.00000	0.00000	0.00849	0.00849	0.00000	0.00199	0.00199	—	7.36287	7.36287	0.00009	0.00028	0.01047	7.45985
Vendor	0.00184	0.00049	0.02433	0.01164	0.00017	0.00017	0.00640	0.00657	0.00017	0.00177	0.00194	—	21.1099	21.1099	0.00106	0.00288	0.02176	22.0165
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. P3 Fine Grading (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	3.42509	2.87803	24.3289	27.1688	0.06093	0.98510	—	0.98510	0.90629	—	0.90629	—	6,598.26	6,598.26	0.26765	0.05353	—	6,620.90
Dust From Material Movement	—	—	—	—	—	—	3.58940	3.58940	—	1.42496	1.42496	—	—	—	—	—	—	—

Onsite truck	0.00219	0.00067	0.02359	0.01421	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.1295	12.1295	0.00140	0.00194	0.01945	12.7616
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.42509	2.87803	24.3289	27.1688	0.06093	0.98510	—	0.98510	0.90629	—	0.90629	—	6,598.26	6,598.26	0.26765	0.05353	—	6,620.90
Dust From Material Movement	—	—	—	—	—	—	3.58940	3.58940	—	1.42496	1.42496	—	—	—	—	—	—	—
Onsite truck	0.00212	0.00058	0.02459	0.01452	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.1555	12.1555	0.00140	0.00194	0.00050	12.7686
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81103	0.68149	5.76087	6.43333	0.01443	0.23326	—	0.23326	0.21460	—	0.21460	—	1,562.41	1,562.41	0.06338	0.01268	—	1,567.77
Dust From Material Movement	—	—	—	—	—	—	0.84994	0.84994	—	0.33742	0.33742	—	—	—	—	—	—	—
Onsite truck	0.00051	0.00015	0.00579	0.00340	0.00002	0.00003	0.27508	0.27511	0.00003	0.02750	0.02753	—	2.87475	2.87475	0.00033	0.00046	0.00199	3.02179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14801	0.12437	1.05136	1.17408	0.00263	0.04257	—	0.04257	0.03916	—	0.03916	—	258.674	258.674	0.01049	0.00210	—	259.562
Dust From Material Movement	—	—	—	—	—	—	0.15511	0.15511	—	0.06158	0.06158	—	—	—	—	—	—	—
Onsite truck	0.00009	0.00003	0.00106	0.00062	< 0.000005	0.00001	0.05020	0.05021	0.00001	0.00502	0.00502	—	0.47595	0.47595	0.00006	0.00008	0.00033	0.50029

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06482	0.05534	0.05137	0.93300	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	251.480	251.480	0.00265	0.00132	0.72554	252.666
Vendor	0.05081	0.01430	0.67713	0.33923	0.00517	0.00517	0.19679	0.20196	0.00517	0.05437	0.05954	—	691.633	691.633	0.03499	0.09665	1.52358	722.831
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06437	0.05490	0.06041	0.80138	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	239.352	239.352	0.00309	0.00948	0.01878	242.273
Vendor	0.04979	0.01430	0.70695	0.34683	0.00517	0.00517	0.19679	0.20196	0.00517	0.05437	0.05954	—	692.019	692.019	0.03549	0.09665	0.03957	721.746
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01535	0.01310	0.01430	0.19837	0.00000	0.00000	0.06115	0.06115	0.00000	0.01432	0.01432	—	57.4511	57.4511	0.00073	0.00224	0.07430	58.2126
Vendor	0.01191	0.00351	0.16742	0.08117	0.00122	0.00122	0.04612	0.04735	0.00122	0.01276	0.01398	—	163.811	163.811	0.00840	0.02288	0.15587	170.996
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00280	0.00239	0.00261	0.03620	0.00000	0.00000	0.01116	0.01116	0.00000	0.00261	0.00261	—	9.51168	9.51168	0.00012	0.00037	0.01230	9.63776
Vendor	0.00217	0.00064	0.03055	0.01481	0.00022	0.00022	0.00842	0.00864	0.00022	0.00233	0.00255	—	27.1207	27.1207	0.00139	0.00379	0.02581	28.3104
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.12. P3 Fine Grading (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	0.63931	0.63931	4.42560	35.3475	0.06093	0.12400	—	0.12400	0.12400	—	0.12400	—	6,598.26	6,598.26	0.26765	0.05353	—	6,620.90
Dust From Material Movement	—	—	—	—	—	—	3.58940	3.58940	—	1.42496	1.42496	—	—	—	—	—	—	—
Onsite truck	0.00219	0.00067	0.02359	0.01421	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.1295	12.1295	0.00140	0.00194	0.01945	12.7616
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63931	0.63931	4.42560	35.3475	0.06093	0.12400	—	0.12400	0.12400	—	0.12400	—	6,598.26	6,598.26	0.26765	0.05353	—	6,620.90
Dust From Material Movement	—	—	—	—	—	—	3.58940	3.58940	—	1.42496	1.42496	—	—	—	—	—	—	—
Onsite truck	0.00212	0.00058	0.02459	0.01452	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.1555	12.1555	0.00140	0.00194	0.00050	12.7686
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15138	0.15138	1.04794	8.36997	0.01443	0.02936	—	0.02936	0.02936	—	0.02936	—	1,562.41	1,562.41	0.06338	0.01268	—	1,567.77
Dust From Material Movement	—	—	—	—	—	—	0.84994	0.84994	—	0.33742	0.33742	—	—	—	—	—	—	—
Onsite truck	0.00051	0.00015	0.00579	0.00340	0.00002	0.00003	0.27508	0.27511	0.00003	0.02750	0.02753	—	2.87475	2.87475	0.00033	0.00046	0.00199	3.02179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02763	0.02763	0.19125	1.52752	0.00263	0.00536	—	0.00536	0.00536	—	0.00536	—	258.674	258.674	0.01049	0.00210	—	259.562

Dust From Material Movement	—	—	—	—	—	—	0.15511	0.15511	—	0.06158	0.06158	—	—	—	—	—	—	—
Onsite truck	0.00009	0.00003	0.00106	0.00062	< 0.000005	0.00001	0.05020	0.05021	0.00001	0.00502	0.00502	—	0.47595	0.47595	0.00006	0.00008	0.00033	0.50029
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06482	0.05534	0.05137	0.93300	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	251.480	251.480	0.00265	0.00132	0.72554	252.666
Vendor	0.05081	0.01430	0.67713	0.33923	0.00517	0.00517	0.19679	0.20196	0.00517	0.05437	0.05954	—	691.633	691.633	0.03499	0.09665	1.52358	722.831
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06437	0.05490	0.06041	0.80138	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	239.352	239.352	0.00309	0.00948	0.01878	242.273
Vendor	0.04979	0.01430	0.70695	0.34683	0.00517	0.00517	0.19679	0.20196	0.00517	0.05437	0.05954	—	692.019	692.019	0.03549	0.09665	0.03957	721.746
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01535	0.01310	0.01430	0.19837	0.00000	0.00000	0.06115	0.06115	0.00000	0.01432	0.01432	—	57.4511	57.4511	0.00073	0.00224	0.07430	58.2126
Vendor	0.01191	0.00351	0.16742	0.08117	0.00122	0.00122	0.04612	0.04735	0.00122	0.01276	0.01398	—	163.811	163.811	0.00840	0.02288	0.15587	170.996
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00280	0.00239	0.00261	0.03620	0.00000	0.00000	0.01116	0.01116	0.00000	0.00261	0.00261	—	9.51168	9.51168	0.00012	0.00037	0.01230	9.63776
Vendor	0.00217	0.00064	0.03055	0.01481	0.00022	0.00022	0.00842	0.00864	0.00022	0.00233	0.00255	—	27.1207	27.1207	0.00139	0.00379	0.02581	28.3104
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.13. P3 Utility Trenching (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07139	0.05999	0.81221	1.50275	0.00226	0.02161	—	0.02161	0.01988	—	0.01988	—	244.938	244.938	0.00994	0.00199	—	245.779
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01285	0.01080	0.14623	0.27055	0.00041	0.00389	—	0.00389	0.00358	—	0.00358	—	44.0985	44.0985	0.00179	0.00036	—	44.2498
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00235	0.00197	0.02669	0.04938	0.00007	0.00071	—	0.00071	0.00065	—	0.00065	—	7.30101	7.30101	0.00030	0.00006	—	7.32606
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00832	0.00708	0.00766	0.10632	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	30.4607	30.4607	0.00039	0.00118	0.00264	30.8262
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00149	0.00128	0.00155	0.01996	0.00000	0.00000	0.00581	0.00581	0.00000	0.00136	0.00136	—	5.55902	5.55902	0.00007	0.00021	0.00790	5.63223
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00027	0.00023	0.00028	0.00364	0.00000	0.00000	0.00106	0.00106	0.00000	0.00025	0.00025	—	0.92036	0.92036	0.00001	0.00004	0.00131	0.93248
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.14. P3 Utility Trenching (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04170	0.04170	1.26951	1.71430	0.00226	0.00463	—	0.00463	0.00463	—	0.00463	—	244.938	244.938	0.00994	0.00199	—	245.779
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.00751	0.00751	0.22856	0.30864	0.00041	0.00083	—	0.00083	0.00083	—	0.00083	—	44.0985	44.0985	0.00179	0.00036	—	44.2498
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00137	0.00137	0.04171	0.05633	0.00007	0.00015	—	0.00015	0.00015	—	0.00015	—	7.30101	7.30101	0.00030	0.00006	—	7.32606
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00832	0.00708	0.00766	0.10632	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	30.4607	30.4607	0.00039	0.00118	0.00264	30.8262
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00149	0.00128	0.00155	0.01996	0.00000	0.00000	0.00581	0.00581	0.00000	0.00136	0.00136	—	5.55902	5.55902	0.00007	0.00021	0.00790	5.63223
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00027	0.00023	0.00028	0.00364	0.00000	0.00000	0.00106	0.00106	0.00000	0.00025	0.00025	—	0.92036	0.92036	0.00001	0.00004	0.00131	0.93248
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.15. P3 Utility Trenching (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	0.06963	0.05851	0.79303	1.50331	0.00226	0.01984	—	0.01984	0.01825	—	0.01825	—	244.920	244.920	0.00994	0.00199	—	245.760
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06963	0.05851	0.79303	1.50331	0.00226	0.01984	—	0.01984	0.01825	—	0.01825	—	244.920	244.920	0.00994	0.00199	—	245.760
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01649	0.01385	0.18778	0.35597	0.00054	0.00470	—	0.00470	0.00432	—	0.00432	—	57.9946	57.9946	0.00235	0.00047	—	58.1937
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00301	0.00253	0.03427	0.06496	0.00010	0.00086	—	0.00086	0.00079	—	0.00079	—	9.60167	9.60167	0.00039	0.00008	—	9.63462
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00810	0.00692	0.00642	0.11662	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	31.4351	31.4351	0.00033	0.00017	0.09069	31.5833
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00805	0.00686	0.00755	0.10017	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	29.9190	29.9190	0.00039	0.00118	0.00235	30.2842
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00192	0.00164	0.00179	0.02480	0.00000	0.00000	0.00764	0.00764	0.00000	0.00179	0.00179	—	7.18139	7.18139	0.00009	0.00028	0.00929	7.27657
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00035	0.00030	0.00033	0.00453	0.00000	0.00000	0.00140	0.00140	0.00000	0.00033	0.00033	—	1.18896	1.18896	0.00002	0.00005	0.00154	1.20472
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.16. P3 Utility Trenching (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	0.04170	0.04170	1.26951	1.71430	0.00226	0.00463	—	0.00463	0.00463	—	0.00463	—	244.920	244.920	0.00994	0.00199	—	245.760
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04170	0.04170	1.26951	1.71430	0.00226	0.00463	—	0.00463	0.00463	—	0.00463	—	244.920	244.920	0.00994	0.00199	—	245.760
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00987	0.00987	0.30061	0.40593	0.00054	0.00110	—	0.00110	0.00110	—	0.00110	—	57.9946	57.9946	0.00235	0.00047	—	58.1937
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00180	0.00180	0.05486	0.07408	0.00010	0.00020	—	0.00020	0.00020	—	0.00020	—	9.60167	9.60167	0.00039	0.00008	—	9.63462
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00810	0.00692	0.00642	0.11662	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	31.4351	31.4351	0.00033	0.00017	0.09069	31.5833
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00805	0.00686	0.00755	0.10017	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	29.9190	29.9190	0.00039	0.00118	0.00235	30.2842
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00192	0.00164	0.00179	0.02480	0.00000	0.00000	0.00764	0.00764	0.00000	0.00179	0.00179	—	7.18139	7.18139	0.00009	0.00028	0.00929	7.27657
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00035	0.00030	0.00033	0.00453	0.00000	0.00000	0.00140	0.00140	0.00000	0.00033	0.00033	—	1.18896	1.18896	0.00002	0.00005	0.00154	1.20472
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
P1 Demolition	Demolition	2/1/2027	5/31/2027	5.00000	86.0000	—
P1 Demolition Debris Onsite Reprocessing	Demolition	2/1/2027	5/31/2027	5.00000	86.0000	—
P1 Site Preparation	Site Preparation	2/1/2027	5/31/2027	5.00000	86.0000	—
P2 Rough Grading	Grading	6/1/2027	9/30/2027	5.00000	88.0000	—
P3 Fine Grading	Grading	10/1/2027	4/30/2028	5.00000	151.000	—
P3 Utility Trenching	Trenching	10/1/2027	4/30/2028	5.00000	151.000	—

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
P1 Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
P1 Demolition	Excavators	Diesel	Average	3.00000	8.00000	36.0000	0.38000
P1 Demolition Debris Onsite Reprocessing	Crushing/Proc. Equipment	Gasoline	Average	1.000000	8.00000	12.0000	0.85000
P1 Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
P1 Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
P2 Rough Grading	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
P2 Rough Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
P2 Rough Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
P2 Rough Grading	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
P2 Rough Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
P3 Fine Grading	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
P3 Fine Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
P3 Fine Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
P3 Fine Grading	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
P3 Fine Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
P3 Utility Trenching	Skid Steer Loaders	Diesel	Average	1.000000	8.00000	71.0000	0.37000

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
P1 Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.000000	8.00000	33.0000	0.73000
P1 Demolition	Excavators	Diesel	Tier 4 Final	3.00000	8.00000	36.0000	0.38000

P1 Demolition Debris Onsite Reprocessing	Crushing/Proc. Equipment	Gasoline	Average	1.000000	8.00000	12.0000	0.85000
P1 Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00000	8.00000	367.000	0.40000
P1 Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00000	8.00000	84.0000	0.37000
P2 Rough Grading	Excavators	Diesel	Tier 4 Final	2.00000	8.00000	36.0000	0.38000
P2 Rough Grading	Graders	Diesel	Tier 4 Final	1.000000	8.00000	148.000	0.41000
P2 Rough Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.000000	8.00000	367.000	0.40000
P2 Rough Grading	Scrapers	Diesel	Tier 4 Final	2.00000	8.00000	423.000	0.48000
P2 Rough Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00000	8.00000	84.0000	0.37000
P3 Fine Grading	Excavators	Diesel	Tier 4 Final	2.00000	8.00000	36.0000	0.38000
P3 Fine Grading	Graders	Diesel	Tier 4 Final	1.000000	8.00000	148.000	0.41000
P3 Fine Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.000000	8.00000	367.000	0.40000
P3 Fine Grading	Scrapers	Diesel	Tier 4 Final	2.00000	8.00000	423.000	0.48000
P3 Fine Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00000	8.00000	84.0000	0.37000
P3 Utility Trenching	Skid Steer Loaders	Diesel	Tier 4 Final	1.000000	8.00000	71.0000	0.37000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
P1 Demolition	Worker	10.00000	18.5000	LDA,LDT1,LDT2
P1 Demolition	Vendor	2.00000	10.2000	HHDT,MHDT
P1 Demolition	Hauling	61.3372	20.0000	HHDT
P1 Demolition	Onsite truck	0.00000	0.00000	HHDT
P1 Demolition Debris Onsite Reprocessing	Worker	2.50000	18.5000	LDA,LDT1,LDT2

P1 Demolition Debris Onsite Reprocessing	Vendor	0.00000	10.2000	HHDT,MHDT
P1 Demolition Debris Onsite Reprocessing	Hauling	0.00000	20.0000	HHDT
P1 Demolition Debris Onsite Reprocessing	Onsite truck	0.00000	0.00000	HHDT
P1 Site Preparation	Worker	17.5000	18.5000	LDA,LDT1,LDT2
P1 Site Preparation	Vendor	19.0000	10.2000	HHDT,MHDT
P1 Site Preparation	Hauling	0.00000	20.0000	HHDT
P1 Site Preparation	Onsite truck	1.000000	2.89000	HHDT
P2 Rough Grading	Worker	20.0000	18.5000	LDA,LDT1,LDT2
P2 Rough Grading	Vendor	23.0000	10.2000	HHDT,MHDT
P2 Rough Grading	Hauling	51.9886	20.0000	HHDT
P2 Rough Grading	Onsite truck	1.000000	3.30000	HHDT
P3 Fine Grading	Worker	20.0000	18.5000	LDA,LDT1,LDT2
P3 Fine Grading	Vendor	23.0000	10.2000	HHDT,MHDT
P3 Fine Grading	Hauling	0.00000	20.0000	HHDT
P3 Fine Grading	Onsite truck	1.000000	3.30000	HHDT
P3 Utility Trenching	Worker	2.50000	18.5000	LDA,LDT1,LDT2
P3 Utility Trenching	Vendor	0.00000	10.2000	HHDT,MHDT
P3 Utility Trenching	Hauling	0.00000	20.0000	HHDT
P3 Utility Trenching	Onsite truck	0.00000	0.00000	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
P1 Demolition	Worker	10.00000	18.5000	LDA,LDT1,LDT2
P1 Demolition	Vendor	2.00000	10.2000	HHDT,MHDT
P1 Demolition	Hauling	61.3372	20.0000	HHDT
P1 Demolition	Onsite truck	0.00000	0.00000	HHDT

P1 Demolition Debris Onsite Reprocessing	Worker	2.50000	18.5000	LDA,LDT1,LDT2
P1 Demolition Debris Onsite Reprocessing	Vendor	0.00000	10.2000	HHDT,MHDT
P1 Demolition Debris Onsite Reprocessing	Hauling	0.00000	20.0000	HHDT
P1 Demolition Debris Onsite Reprocessing	Onsite truck	0.00000	0.00000	HHDT
P1 Site Preparation	Worker	17.5000	18.5000	LDA,LDT1,LDT2
P1 Site Preparation	Vendor	19.0000	10.2000	HHDT,MHDT
P1 Site Preparation	Hauling	0.00000	20.0000	HHDT
P1 Site Preparation	Onsite truck	1.000000	2.89000	HHDT
P2 Rough Grading	Worker	20.0000	18.5000	LDA,LDT1,LDT2
P2 Rough Grading	Vendor	23.0000	10.2000	HHDT,MHDT
P2 Rough Grading	Hauling	51.9886	20.0000	HHDT
P2 Rough Grading	Onsite truck	1.000000	3.30000	HHDT
P3 Fine Grading	Worker	20.0000	18.5000	LDA,LDT1,LDT2
P3 Fine Grading	Vendor	23.0000	10.2000	HHDT,MHDT
P3 Fine Grading	Hauling	0.00000	20.0000	HHDT
P3 Fine Grading	Onsite truck	1.000000	3.30000	HHDT
P3 Utility Trenching	Worker	2.50000	18.5000	LDA,LDT1,LDT2
P3 Utility Trenching	Vendor	0.00000	10.2000	HHDT,MHDT
P3 Utility Trenching	Hauling	0.00000	20.0000	HHDT
P3 Utility Trenching	Onsite truck	0.00000	0.00000	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

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
P1 Demolition	0.00000	0.00000	0.00000	21,098.0	0.00000
P1 Demolition Debris Onsite Reprocessing	0.00000	0.00000	0.00000	21,098.0	0.00000
P1 Site Preparation	0.00000	0.00000	129.000	0.00000	0.00000
P2 Rough Grading	36,600.0	0.00000	264.000	0.00000	0.00000
P3 Fine Grading	0.00000	0.00000	453.000	0.00000	0.00000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	531.983	0.03300	0.00400
2028	0.00000	531.983	0.03300	0.00400

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Construction: Construction Phases	Based on applicant information, see assumptions file
Construction: Off-Road Equipment	Phase 1-3 equipment mix based on acreage of 13.76 acres, assume shared equipment, demolition debris onsite reprocessing and utility trenching based on previous residential development projects.
Construction: Trips and VMT	Included CalEEMod default vendor trips and included calculated water truck trips as vendor trips, calculated onsite truck trip length for ground-disturbing activities, see assumptions file

8.4. Construction

8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value
P1 Demolition Debris Onsite Reprocessing	Hauling	One-Way Trips per Day	61.3372	0.00000

CalEEMod Unmitigated and Mitigated Construction Model P4.1

5600 Beach Boulevard Residential Development Project, Affordable Site Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

3. Construction Emissions Details

3.1. P4.1 Building Construction (Senior Affordable Apartments) (2027) - Unmitigated

3.2. P4.1 Building Construction (Senior Affordable Apartments) (2027) - Mitigated

3.3. P4.1 Building Construction (Senior Affordable Apartments) (2028) - Unmitigated

3.4. P4.1 Building Construction (Senior Affordable Apartments) (2028) - Mitigated

3.5. P4.1 Building Construction (Senior Affordable Apartments) (2029) - Unmitigated

3.6. P4.1 Building Construction (Senior Affordable Apartments) (2029) - Mitigated

3.7. P4.1 Paving (2029) - Unmitigated

3.8. P4.1 Paving (2029) - Mitigated

3.9. P4.1 Architectural Coating (2029) - Unmitigated

3.10. P4.1 Architectural Coating (2029) - Mitigated

3.11. P4.1 Finishing and Landscaping (2029) - Unmitigated

3.12. P4.1 Finishing and Landscaping (2029) - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	5600 Beach Boulevard Residential Development Project, Affordable Site
Construction Start Date	10/1/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	18.8000
Location	5600 Beach Blvd, Buena Park, CA 90621, USA
County	Orange
City	Buena Park
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5798
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.37

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	50.0000	Dwelling Unit	0.76000	42,700.0	16,660.0	0.00000	149.000	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

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.	11.7243	11.4925	9.20412	15.9081	0.02391	0.29623	0.85625	1.15248	0.27267	0.20334	0.47600	—	3,217.08	3,217.08	0.11054	0.05315	2.39233	3,238.07
Mit.	2.69782	2.62435	4.87888	17.3195	0.02391	0.08890	0.85625	0.94515	0.08505	0.20334	0.28838	—	3,217.08	3,217.08	0.11054	0.05315	2.39233	3,238.07
% Reduced	77%	77%	47%	-9%	—	70%	—	18%	69%	—	39%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.69927	0.58135	4.83696	8.51364	0.01325	0.16832	0.51629	0.68460	0.15495	0.12293	0.27788	—	1,907.62	1,907.62	0.06672	0.05011	0.04820	1,924.26
Mit.	0.25617	0.22875	0.92320	9.71625	0.01325	0.02589	0.51629	0.54217	0.02589	0.12293	0.14882	—	1,907.62	1,907.62	0.06672	0.05011	0.04820	1,924.26
% Reduced	63%	61%	81%	-14%	—	85%	—	21%	83%	—	46%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.13892	1.07108	3.27719	6.08417	0.00949	0.10743	0.36538	0.47281	0.09890	0.08695	0.18585	—	1,362.33	1,362.33	0.04779	0.03589	0.51410	1,374.73
Mit.	0.30598	0.28889	0.76171	6.94006	0.00949	0.01854	0.36538	0.38393	0.01854	0.08695	0.10549	—	1,362.33	1,362.33	0.04779	0.03589	0.51410	1,374.73
% Reduced	73%	73%	77%	-14%	—	83%	—	19%	81%	—	43%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20785	0.19547	0.59809	1.11036	0.00173	0.01961	0.06668	0.08629	0.01805	0.01587	0.03392	—	225.549	225.549	0.00791	0.00594	0.08512	227.602
Mit.	0.05584	0.05272	0.13901	1.26656	0.00173	0.00338	0.06668	0.07007	0.00338	0.01587	0.01925	—	225.549	225.549	0.00791	0.00594	0.08512	227.602
% Reduced	73%	73%	77%	-14%	—	83%	—	19%	81%	—	43%	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.67501	0.56217	4.55231	8.66517	0.01325	0.14999	0.51629	0.66627	0.13808	0.12293	0.26102	—	1,917.95	1,917.95	0.06581	0.03542	1.66004	1,931.81
2029	11.7243	11.4925	9.20412	15.9081	0.02391	0.29623	0.85625	1.15248	0.27267	0.20334	0.47600	—	3,217.08	3,217.08	0.11054	0.05315	2.39233	3,238.07
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.69927	0.58135	4.83696	8.51364	0.01325	0.16832	0.51629	0.68460	0.15495	0.12293	0.27788	—	1,907.62	1,907.62	0.06671	0.05011	0.04820	1,924.26
2028	0.67398	0.56137	4.57551	8.43003	0.01325	0.14999	0.51629	0.66627	0.13808	0.12293	0.26102	—	1,896.21	1,896.21	0.06672	0.05011	0.04300	1,912.85
2029	0.65717	0.54650	4.36385	8.32695	0.01325	0.13764	0.51629	0.65392	0.12672	0.12293	0.24965	—	1,884.26	1,884.26	0.06579	0.05010	0.03822	1,900.87
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.12577	0.10469	0.87354	1.54439	0.00239	0.03030	0.09184	0.12215	0.02790	0.02186	0.04975	—	344.515	344.515	0.01201	0.00902	0.14433	347.648
2028	0.48339	0.40273	3.27719	6.08417	0.00949	0.10743	0.36538	0.47281	0.09890	0.08695	0.18585	—	1,362.33	1,362.33	0.04779	0.03589	0.51410	1,374.73
2029	1.13892	1.07108	2.67700	5.00004	0.00784	0.08483	0.29647	0.38130	0.07810	0.07051	0.14861	—	1,102.38	1,102.38	0.03834	0.02875	0.36916	1,112.27
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.02295	0.01911	0.15942	0.28185	0.00044	0.00553	0.01676	0.02229	0.00509	0.00399	0.00908	—	57.0384	57.0384	0.00199	0.00149	0.02389	57.5571
2028	0.08822	0.07350	0.59809	1.11036	0.00173	0.01961	0.06668	0.08629	0.01805	0.01587	0.03392	—	225.549	225.549	0.00791	0.00594	0.08512	227.602
2029	0.20785	0.19547	0.48855	0.91251	0.00143	0.01548	0.05411	0.06959	0.01425	0.01287	0.02712	—	182.511	182.511	0.00635	0.00476	0.06112	184.149

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.25191	0.22636	0.89169	9.86014	0.01325	0.02589	0.51629	0.54217	0.02589	0.12293	0.14882	—	1,917.95	1,917.95	0.06581	0.03542	1.66004	1,931.81
2029	2.69782	2.62435	4.87888	17.3195	0.02391	0.08890	0.85625	0.94515	0.08505	0.20334	0.28838	—	3,217.08	3,217.08	0.11054	0.05315	2.39233	3,238.07
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.25617	0.22875	0.92320	9.71625	0.01325	0.02589	0.51629	0.54217	0.02589	0.12293	0.14882	—	1,907.62	1,907.62	0.06671	0.05011	0.04820	1,924.26
2028	0.25088	0.22557	0.91489	9.62500	0.01325	0.02589	0.51629	0.54217	0.02589	0.12293	0.14882	—	1,896.21	1,896.21	0.06672	0.05011	0.04300	1,912.85
2029	0.24692	0.22148	0.89270	9.53443	0.01325	0.02589	0.51629	0.54217	0.02589	0.12293	0.14882	—	1,884.26	1,884.26	0.06579	0.05010	0.03822	1,900.87
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.04600	0.04120	0.16891	1.76090	0.00239	0.00466	0.09184	0.09651	0.00466	0.02186	0.02652	—	344.515	344.515	0.01201	0.00902	0.14433	347.648
2028	0.18035	0.16222	0.65530	6.94006	0.00949	0.01854	0.36538	0.38393	0.01854	0.08695	0.10549	—	1,362.33	1,362.33	0.04779	0.03589	0.51410	1,374.73
2029	0.30598	0.28889	0.76171	5.65966	0.00784	0.01832	0.29647	0.31479	0.01805	0.07051	0.08856	—	1,102.38	1,102.38	0.03834	0.02875	0.36916	1,112.27
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00839	0.00752	0.03083	0.32136	0.00044	0.00085	0.01676	0.01761	0.00085	0.00399	0.00484	—	57.0384	57.0384	0.00199	0.00149	0.02389	57.5571
2028	0.03291	0.02960	0.11959	1.26656	0.00173	0.00338	0.06668	0.07007	0.00338	0.01587	0.01925	—	225.549	225.549	0.00791	0.00594	0.08512	227.602
2029	0.05584	0.05272	0.13901	1.03289	0.00143	0.00334	0.05411	0.05745	0.00329	0.01287	0.01616	—	182.511	182.511	0.00635	0.00476	0.06112	184.149

3. Construction Emissions Details

3.1. P4.1 Building Construction (Senior Affordable Apartments) (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56653	0.47604	4.55564	6.89930	0.01205	0.16712	—	0.16712	0.15375	—	0.15375	—	1,304.35	1,304.35	0.05291	0.01058	—	1,308.83
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10200	0.08571	0.82019	1.24214	0.00217	0.03009	—	0.03009	0.02768	—	0.02768	—	234.834	234.834	0.00953	0.00191	—	235.640
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01861	0.01564	0.14969	0.22669	0.00040	0.00549	—	0.00549	0.00505	—	0.00505	—	38.8795	38.8795	0.00158	0.00032	—	39.0129
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11984	0.10199	0.11032	1.53098	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	438.635	438.635	0.00556	0.01706	0.03800	443.897

Vendor	0.01289	0.00332	0.17101	0.08336	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	164.631	164.631	0.00825	0.02246	0.01019	171.540
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02143	0.01836	0.02236	0.28742	0.00000	0.00000	0.08370	0.08370	0.00000	0.01960	0.01960	—	80.0499	80.0499	0.00100	0.00307	0.11378	81.1042
Vendor	0.00234	0.00062	0.03099	0.01482	0.00022	0.00022	0.00815	0.00837	0.00022	0.00225	0.00247	—	29.6310	29.6310	0.00149	0.00404	0.03054	30.9037
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00391	0.00335	0.00408	0.05245	0.00000	0.00000	0.01527	0.01527	0.00000	0.00358	0.00358	—	13.2532	13.2532	0.00017	0.00051	0.01884	13.4277
Vendor	0.00043	0.00011	0.00566	0.00270	0.00004	0.00004	0.00149	0.00153	0.00004	0.00041	0.00045	—	4.90575	4.90575	0.00025	0.00067	0.00506	5.11645
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. P4.1 Building Construction (Senior Affordable Apartments) (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12344	0.12344	0.64187	8.10192	0.01205	0.02469	—	0.02469	0.02469	—	0.02469	—	1,304.35	1,304.35	0.05291	0.01058	—	1,308.83
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.02222	0.02222	0.11556	1.45866	0.00217	0.00444	—	0.00444	0.00444	—	0.00444	—	234.834	234.834	0.00953	0.00191	—	235.640
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00406	0.00406	0.02109	0.26621	0.00040	0.00081	—	0.00081	0.00081	—	0.00081	—	38.8795	38.8795	0.00158	0.00032	—	39.0129
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11984	0.10199	0.11032	1.53098	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	438.635	438.635	0.00556	0.01706	0.03800	443.897
Vendor	0.01289	0.00332	0.17101	0.08336	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	164.631	164.631	0.00825	0.02246	0.01019	171.540
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02143	0.01836	0.02236	0.28742	0.00000	0.00000	0.08370	0.08370	0.00000	0.01960	0.01960	—	80.0499	80.0499	0.00100	0.00307	0.11378	81.1042
Vendor	0.00234	0.00062	0.03099	0.01482	0.00022	0.00022	0.00815	0.00837	0.00022	0.00225	0.00247	—	29.6310	29.6310	0.00149	0.00404	0.03054	30.9037
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00391	0.00335	0.00408	0.05245	0.00000	0.00000	0.01527	0.01527	0.00000	0.00358	0.00358	—	13.2532	13.2532	0.00017	0.00051	0.01884	13.4277
Vendor	0.00043	0.00011	0.00566	0.00270	0.00004	0.00004	0.00149	0.00153	0.00004	0.00041	0.00045	—	4.90575	4.90575	0.00025	0.00067	0.00506	5.11645
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. P4.1 Building Construction (Senior Affordable Apartments) (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	0.54653	0.45924	4.30249	6.90694	0.01205	0.14878	—	0.14878	0.13688	—	0.13688	—	1,304.56	1,304.56	0.05292	0.01058	—	1,309.03
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54653	0.45924	4.30249	6.90694	0.01205	0.14878	—	0.14878	0.13688	—	0.13688	—	1,304.56	1,304.56	0.05292	0.01058	—	1,309.03
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39145	0.32893	3.08163	4.94705	0.00863	0.10657	—	0.10657	0.09804	—	0.09804	—	934.378	934.378	0.03790	0.00758	—	937.585
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07144	0.06003	0.56240	0.90284	0.00158	0.01945	—	0.01945	0.01789	—	0.01789	—	154.697	154.697	0.00628	0.00126	—	155.228

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11667	0.09960	0.09246	1.67939	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	452.665	452.665	0.00476	0.00238	1.30598	454.799
Vendor	0.01181	0.00332	0.15736	0.07883	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	160.729	160.729	0.00813	0.02246	0.35407	167.980
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11587	0.09881	0.10873	1.44248	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	430.834	430.834	0.00556	0.01706	0.03380	436.092
Vendor	0.01157	0.00332	0.16429	0.08060	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	160.819	160.819	0.00825	0.02246	0.00920	167.728
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08356	0.07134	0.07788	1.08007	0.00000	0.00000	0.33296	0.33296	0.00000	0.07798	0.07798	—	312.800	312.800	0.00398	0.01222	0.40454	316.946
Vendor	0.00837	0.00246	0.11769	0.05705	0.00086	0.00086	0.03242	0.03328	0.00086	0.00897	0.00983	—	115.148	115.148	0.00591	0.01609	0.10956	120.200
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01525	0.01302	0.01421	0.19711	0.00000	0.00000	0.06077	0.06077	0.00000	0.01423	0.01423	—	51.7876	51.7876	0.00066	0.00202	0.06698	52.4740
Vendor	0.00153	0.00045	0.02148	0.01041	0.00016	0.00016	0.00592	0.00607	0.00016	0.00164	0.00179	—	19.0641	19.0641	0.00098	0.00266	0.01814	19.9004
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. P4.1 Building Construction (Senior Affordable Apartments) (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	0.12344	0.12344	0.64187	8.10192	0.01205	0.02469	—	0.02469	0.02469	—	0.02469	—	1,304.56	1,304.56	0.05292	0.01058	—	1,309.03
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12344	0.12344	0.64187	8.10192	0.01205	0.02469	—	0.02469	0.02469	—	0.02469	—	1,304.56	1,304.56	0.05292	0.01058	—	1,309.03
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08841	0.08841	0.45974	5.80294	0.00863	0.01768	—	0.01768	0.01768	—	0.01768	—	934.378	934.378	0.03790	0.00758	—	937.585
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01613	0.01613	0.08390	1.05904	0.00158	0.00323	—	0.00323	0.00323	—	0.00323	—	154.697	154.697	0.00628	0.00126	—	155.228
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11667	0.09960	0.09246	1.67939	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	452.665	452.665	0.00476	0.00238	1.30598	454.799
Vendor	0.01181	0.00332	0.15736	0.07883	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	160.729	160.729	0.00813	0.02246	0.35407	167.980
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11587	0.09881	0.10873	1.44248	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	430.834	430.834	0.00556	0.01706	0.03380	436.092
Vendor	0.01157	0.00332	0.16429	0.08060	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	160.819	160.819	0.00825	0.02246	0.00920	167.728
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08356	0.07134	0.07788	1.08007	0.00000	0.00000	0.33296	0.33296	0.00000	0.07798	0.07798	—	312.800	312.800	0.00398	0.01222	0.40454	316.946
Vendor	0.00837	0.00246	0.11769	0.05705	0.00086	0.00086	0.03242	0.03328	0.00086	0.00897	0.00983	—	115.148	115.148	0.00591	0.01609	0.10956	120.200
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01525	0.01302	0.01421	0.19711	0.00000	0.00000	0.06077	0.06077	0.00000	0.01423	0.01423	—	51.7876	51.7876	0.00066	0.00202	0.06698	52.4740
Vendor	0.00153	0.00045	0.02148	0.01041	0.00016	0.00016	0.00592	0.00607	0.00016	0.00164	0.00179	—	19.0641	19.0641	0.00098	0.00266	0.01814	19.9004
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. P4.1 Building Construction (Senior Affordable Apartments) (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	0.53369	0.44845	4.11303	6.89444	0.01205	0.13643	—	0.13643	0.12552	—	0.12552	—	1,304.11	1,304.11	0.05290	0.01058	—	1,308.59

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53369	0.44845	4.11303	6.89444	0.01205	0.13643	—	0.13643	0.12552	—	0.12552	—	1,304.11	1,304.11	0.05290	0.01058	—	1,308.59
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28512	0.23958	2.19737	3.68333	0.00644	0.07289	—	0.07289	0.06706	—	0.06706	—	696.717	696.717	0.02826	0.00565	—	699.108
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05203	0.04372	0.40102	0.67221	0.00117	0.01330	—	0.01330	0.01224	—	0.01224	—	115.350	115.350	0.00468	0.00094	—	115.745
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11270	0.09643	0.09167	1.57939	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	445.023	445.023	0.00476	0.00238	1.16110	447.013
Vendor	0.01181	0.00332	0.15041	0.07608	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	156.470	156.470	0.00813	0.02246	0.31625	163.682
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11191	0.09484	0.09326	1.35478	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	423.585	423.585	0.00476	0.01706	0.03002	428.819
Vendor	0.01157	0.00321	0.15757	0.07773	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	156.562	156.562	0.00813	0.02246	0.00820	163.467
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05936	0.05025	0.04982	0.75919	0.00000	0.00000	0.24836	0.24836	0.00000	0.05817	0.05817	—	229.390	229.390	0.00254	0.00912	0.26809	232.438
Vendor	0.00625	0.00178	0.08413	0.04108	0.00064	0.00064	0.02418	0.02483	0.00064	0.00669	0.00733	—	83.6143	83.6143	0.00434	0.01200	0.07291	87.3715
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01083	0.00917	0.00909	0.13855	0.00000	0.00000	0.04533	0.04533	0.00000	0.01062	0.01062	—	37.9781	37.9781	0.00042	0.00151	0.04439	38.4828
Vendor	0.00114	0.00032	0.01535	0.00750	0.00012	0.00012	0.00441	0.00453	0.00012	0.00122	0.00134	—	13.8433	13.8433	0.00072	0.00199	0.01207	14.4654
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. P4.1 Building Construction (Senior Affordable Apartments) (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	0.12344	0.12344	0.64187	8.10192	0.01205	0.02469	—	0.02469	0.02469	—	0.02469	—	1,304.11	1,304.11	0.05290	0.01058	—	1,308.59
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12344	0.12344	0.64187	8.10192	0.01205	0.02469	—	0.02469	0.02469	—	0.02469	—	1,304.11	1,304.11	0.05290	0.01058	—	1,308.59
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06595	0.06595	0.34292	4.32842	0.00644	0.01319	—	0.01319	0.01319	—	0.01319	—	696.717	696.717	0.02826	0.00565	—	699.108
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01204	0.01204	0.06258	0.78994	0.00117	0.00241	—	0.00241	0.00241	—	0.00241	—	115.350	115.350	0.00468	0.00094	—	115.745
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11270	0.09643	0.09167	1.57939	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	445.023	445.023	0.00476	0.00238	1.16110	447.013
Vendor	0.01181	0.00332	0.15041	0.07608	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	156.470	156.470	0.00813	0.02246	0.31625	163.682
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11191	0.09484	0.09326	1.35478	0.00000	0.00000	0.47055	0.47055	0.00000	0.11030	0.11030	—	423.585	423.585	0.00476	0.01706	0.03002	428.819
Vendor	0.01157	0.00321	0.15757	0.07773	0.00120	0.00120	0.04573	0.04693	0.00120	0.01263	0.01384	—	156.562	156.562	0.00813	0.02246	0.00820	163.467
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05936	0.05025	0.04982	0.75919	0.00000	0.00000	0.24836	0.24836	0.00000	0.05817	0.05817	—	229.390	229.390	0.00254	0.00912	0.26809	232.438
Vendor	0.00625	0.00178	0.08413	0.04108	0.00064	0.00064	0.02418	0.02483	0.00064	0.00669	0.00733	—	83.6143	83.6143	0.00434	0.01200	0.07291	87.3715
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01083	0.00917	0.00909	0.13855	0.00000	0.00000	0.04533	0.04533	0.00000	0.01062	0.01062	—	37.9781	37.9781	0.00042	0.00151	0.04439	38.4828
Vendor	0.00114	0.00032	0.01535	0.00750	0.00012	0.00012	0.00441	0.00453	0.00012	0.00122	0.00134	—	13.8433	13.8433	0.00072	0.00199	0.01207	14.4654
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. P4.1 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	0.45201	0.37708	3.15619	3.63030	0.00623	0.12633	—	0.12633	0.11622	—	0.11622	—	568.976	568.976	0.02308	0.00462	—	570.929
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03220	0.02686	0.22482	0.25860	0.00044	0.00900	—	0.00900	0.00828	—	0.00828	—	40.5298	40.5298	0.00164	0.00033	—	40.6689

Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00588	0.00490	0.04103	0.04719	0.00008	0.00164	—	0.00164	0.00151	—	0.00151	—	6.71018	6.71018	0.00027	0.00005	—	6.73320
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04696	0.04018	0.03820	0.65808	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	185.426	185.426	0.00198	0.00099	0.48379	186.255
Vendor	0.00442	0.00124	0.05628	0.02847	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	58.5481	58.5481	0.00304	0.00840	0.11834	61.2469
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00330	0.00279	0.00277	0.04218	0.00000	0.00000	0.01380	0.01380	0.00000	0.00323	0.00323	—	12.7439	12.7439	0.00014	0.00051	0.01489	12.9132
Vendor	0.00031	0.00009	0.00420	0.00205	0.00003	0.00003	0.00121	0.00124	0.00003	0.00033	0.00037	—	4.17159	4.17159	0.00022	0.00060	0.00364	4.35904
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00060	0.00051	0.00051	0.00770	0.00000	0.00000	0.00252	0.00252	0.00000	0.00059	0.00059	—	2.10990	2.10990	0.00002	0.00008	0.00247	2.13793
Vendor	0.00006	0.00002	0.00077	0.00037	0.00001	0.00001	0.00022	0.00023	0.00001	0.00006	0.00007	—	0.69065	0.69065	0.00004	0.00010	0.00060	0.72169
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8. P4.1 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	0.24337	0.20899	1.96021	3.77254	0.00623	0.05558	—	0.05558	0.05172	—	0.05172	—	568.976	568.976	0.02308	0.00462	—	570.929
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01734	0.01489	0.13963	0.26873	0.00044	0.00396	—	0.00396	0.00368	—	0.00368	—	40.5298	40.5298	0.00164	0.00033	—	40.6689
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00316	0.00272	0.02548	0.04904	0.00008	0.00072	—	0.00072	0.00067	—	0.00067	—	6.71018	6.71018	0.00027	0.00005	—	6.73320
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04696	0.04018	0.03820	0.65808	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	185.426	185.426	0.00198	0.00099	0.48379	186.255
Vendor	0.00442	0.00124	0.05628	0.02847	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	58.5481	58.5481	0.00304	0.00840	0.11834	61.2469
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00330	0.00279	0.00277	0.04218	0.00000	0.00000	0.01380	0.01380	0.00000	0.00323	0.00323	—	12.7439	12.7439	0.00014	0.00051	0.01489	12.9132
Vendor	0.00031	0.00009	0.00420	0.00205	0.00003	0.00003	0.00121	0.00124	0.00003	0.00033	0.00037	—	4.17159	4.17159	0.00022	0.00060	0.00364	4.35904
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00060	0.00051	0.00051	0.00770	0.00000	0.00000	0.00252	0.00252	0.00000	0.00059	0.00059	—	2.10990	2.10990	0.00002	0.00008	0.00247	2.13793
Vendor	0.00006	0.00002	0.00077	0.00037	0.00001	0.00001	0.00022	0.00023	0.00001	0.00006	0.00007	—	0.69065	0.69065	0.00004	0.00010	0.00060	0.72169
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. P4.1 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12385	0.10236	0.79416	1.11216	0.00173	0.01284	—	0.01284	0.01181	—	0.01181	—	133.510	133.510	0.00542	0.00108	—	133.968

Architectural Coating	10.3399	10.3399	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00882	0.00729	0.05657	0.07922	0.00012	0.00091	—	0.00091	0.00084	—	0.00084	—	9.51028	9.51028	0.00039	0.00008	—	9.54292
Architectural Coatings	0.73654	0.73654	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00161	0.00133	0.01032	0.01446	0.00002	0.00017	—	0.00017	0.00015	—	0.00015	—	1.57454	1.57454	0.00006	0.00001	—	1.57994
Architectural Coatings	0.13442	0.13442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02254	0.01929	0.01833	0.31588	0.00000	0.00000	0.09411	0.09411	0.00000	0.02206	0.02206	—	89.0046	89.0046	0.00095	0.00048	0.23222	89.4025
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00158	0.00134	0.00133	0.02025	0.00000	0.00000	0.00662	0.00662	0.00000	0.00155	0.00155	—	6.11707	6.11707	0.00007	0.00024	0.00715	6.19836
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00029	0.00024	0.00024	0.00369	0.00000	0.00000	0.00121	0.00121	0.00000	0.00028	0.00028	—	1.01275	1.01275	0.00001	0.00004	0.00118	1.02621
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10. P4.1 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02114	0.02114	0.64604	0.96319	0.00173	0.00235	—	0.00235	0.00235	—	0.00235	—	133.510	133.510	0.00542	0.00108	—	133.968
Architectural Coatings	2.06192	2.06192	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00151	0.00151	0.04602	0.06861	0.00012	0.00017	—	0.00017	0.00017	—	0.00017	—	9.51028	9.51028	0.00039	0.00008	—	9.54292
Architectural Coatings	0.14688	0.14688	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00027	0.00027	0.00840	0.01252	0.00002	0.00003	—	0.00003	0.00003	—	0.00003	—	1.57454	1.57454	0.00006	0.00001	—	1.57994
Architectural Coatings	0.02680	0.02680	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02254	0.01929	0.01833	0.31588	0.00000	0.00000	0.09411	0.09411	0.00000	0.02206	0.02206	—	89.0046	89.0046	0.00095	0.00048	0.23222	89.4025
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00158	0.00134	0.00133	0.02025	0.00000	0.00000	0.00662	0.00662	0.00000	0.00155	0.00155	—	6.11707	6.11707	0.00007	0.00024	0.00715	6.19836
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00029	0.00024	0.00024	0.00369	0.00000	0.00000	0.00121	0.00121	0.00000	0.00028	0.00028	—	1.01275	1.01275	0.00001	0.00004	0.00118	1.02621
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. P4.1 Finishing and Landscaping (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	0.06854	0.05759	0.77949	1.50363	0.00226	0.01898	—	0.01898	0.01746	—	0.01746	—	245.104	245.104	0.00994	0.00199	—	245.945
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00488	0.00410	0.05553	0.10711	0.00016	0.00135	—	0.00135	0.00124	—	0.00124	—	17.4595	17.4595	0.00071	0.00014	—	17.5194

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00089	0.00075	0.01013	0.01955	0.00003	0.00025	—	0.00025	0.00023	—	0.00023	—	2.89062	2.89062	0.00012	0.00002	—	2.90054
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00783	0.00670	0.00637	0.10968	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	30.9044	30.9044	0.00033	0.00017	0.08063	31.0425
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00055	0.00047	0.00046	0.00703	0.00000	0.00000	0.00230	0.00230	0.00000	0.00054	0.00054	—	2.12398	2.12398	0.00002	0.00008	0.00248	2.15221
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00010	0.00008	0.00008	0.00128	0.00000	0.00000	0.00042	0.00042	0.00000	0.00010	0.00010	—	0.35165	0.35165	< 0.000005	0.00001	0.00041	0.35632
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.12. P4.1 Finishing and Landscaping (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	0.04170	0.04170	1.26951	1.71430	0.00226	0.00463	—	0.00463	0.00463	—	0.00463	—	245.104	245.104	0.00994	0.00199	—	245.945
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00297	0.00297	0.09043	0.12211	0.00016	0.00033	—	0.00033	0.00033	—	0.00033	—	17.4595	17.4595	0.00071	0.00014	—	17.5194
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00054	0.00054	0.01650	0.02229	0.00003	0.00006	—	0.00006	0.00006	—	0.00006	—	2.89062	2.89062	0.00012	0.00002	—	2.90054
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00783	0.00670	0.00637	0.10968	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	30.9044	30.9044	0.00033	0.00017	0.08063	31.0425
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00055	0.00047	0.00046	0.00703	0.00000	0.00000	0.00230	0.00230	0.00000	0.00054	0.00054	—	2.12398	2.12398	0.00002	0.00008	0.00248	2.15221
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00010	0.00008	0.00008	0.00128	0.00000	0.00000	0.00042	0.00042	0.00000	0.00010	0.00010	—	0.35165	0.35165	< 0.000005	0.00001	0.00041	0.35632
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
P4.1 Building Construction (Senior Affordable Apartments)	Building Construction	10/1/2027	9/30/2029	5.00000	521.000	—
P4.1 Paving	Paving	8/24/2029	9/30/2029	5.00000	26.0000	—
P4.1 Architectural Coating	Architectural Coating	8/24/2029	9/30/2029	5.00000	26.0000	—
P4.1 Finishing and Landscaping	Trenching	8/24/2029	9/30/2029	5.00000	26.0000	—

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
P4.1 Building Construction (Senior Affordable Apartments)	Cranes	Diesel	Average	1.000000	4.00000	367.000	0.29000
P4.1 Building Construction (Senior Affordable Apartments)	Forklifts	Diesel	Average	2.00000	6.00000	82.0000	0.20000
P4.1 Building Construction (Senior Affordable Apartments)	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
P4.1 Paving	Cement and Mortar Mixers	Diesel	Average	4.00000	6.00000	10.00000	0.56000
P4.1 Paving	Pavers	Diesel	Average	1.000000	7.00000	81.0000	0.42000
P4.1 Paving	Rollers	Diesel	Average	1.000000	7.00000	36.0000	0.38000
P4.1 Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000
P4.1 Finishing and Landscaping	Skid Steer Loaders	Diesel	Average	1.000000	8.00000	71.0000	0.37000

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
P4.1 Building Construction (Senior Affordable Apartments)	Cranes	Diesel	Tier 4 Final	1.000000	4.00000	367.000	0.29000
P4.1 Building Construction (Senior Affordable Apartments)	Forklifts	Diesel	Tier 4 Final	2.00000	6.00000	82.0000	0.20000
P4.1 Building Construction (Senior Affordable Apartments)	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00000	8.00000	84.0000	0.37000

P4.1 Paving	Cement and Mortar Mixers	Diesel	Average	4.00000	6.00000	10.00000	0.56000
P4.1 Paving	Pavers	Diesel	Tier 4 Final	1.000000	7.00000	81.0000	0.42000
P4.1 Paving	Rollers	Diesel	Tier 4 Final	1.000000	7.00000	36.0000	0.38000
P4.1 Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.000000	6.00000	37.0000	0.48000
P4.1 Finishing and Landscaping	Skid Steer Loaders	Diesel	Tier 4 Final	1.000000	8.00000	71.0000	0.37000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
P4.1 Building Construction (Senior Affordable Apartments)	Worker	36.0000	18.5000	LDA,LDT1,LDT2
P4.1 Building Construction (Senior Affordable Apartments)	Vendor	5.34500	10.2000	HHDT,MHDT
P4.1 Building Construction (Senior Affordable Apartments)	Hauling	0.00000	20.0000	HHDT
P4.1 Building Construction (Senior Affordable Apartments)	Onsite truck	0.00000	0.00000	HHDT
P4.1 Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
P4.1 Paving	Vendor	2.00000	10.2000	HHDT,MHDT
P4.1 Paving	Hauling	0.00000	20.0000	HHDT
P4.1 Paving	Onsite truck	0.00000	0.00000	HHDT
P4.1 Architectural Coating	Worker	7.20000	18.5000	LDA,LDT1,LDT2
P4.1 Architectural Coating	Vendor	0.00000	10.2000	HHDT,MHDT
P4.1 Architectural Coating	Hauling	0.00000	20.0000	HHDT
P4.1 Architectural Coating	Onsite truck	0.00000	0.00000	HHDT
P4.1 Finishing and Landscaping	Worker	2.50000	18.5000	LDA,LDT1,LDT2
P4.1 Finishing and Landscaping	Vendor	0.00000	10.2000	HHDT,MHDT

P4.1 Finishing and Landscaping	Hauling	0.00000	20.0000	HHDT
P4.1 Finishing and Landscaping	Onsite truck	0.00000	0.00000	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
P4.1 Building Construction (Senior Affordable Apartments)	Worker	36.0000	18.5000	LDA,LDT1,LDT2
P4.1 Building Construction (Senior Affordable Apartments)	Vendor	5.34500	10.2000	HHDT,MHDT
P4.1 Building Construction (Senior Affordable Apartments)	Hauling	0.00000	20.0000	HHDT
P4.1 Building Construction (Senior Affordable Apartments)	Onsite truck	0.00000	0.00000	HHDT
P4.1 Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
P4.1 Paving	Vendor	2.00000	10.2000	HHDT,MHDT
P4.1 Paving	Hauling	0.00000	20.0000	HHDT
P4.1 Paving	Onsite truck	0.00000	0.00000	HHDT
P4.1 Architectural Coating	Worker	7.20000	18.5000	LDA,LDT1,LDT2
P4.1 Architectural Coating	Vendor	0.00000	10.2000	HHDT,MHDT
P4.1 Architectural Coating	Hauling	0.00000	20.0000	HHDT
P4.1 Architectural Coating	Onsite truck	0.00000	0.00000	HHDT
P4.1 Finishing and Landscaping	Worker	2.50000	18.5000	LDA,LDT1,LDT2
P4.1 Finishing and Landscaping	Vendor	0.00000	10.2000	HHDT,MHDT
P4.1 Finishing and Landscaping	Hauling	0.00000	20.0000	HHDT
P4.1 Finishing and Landscaping	Onsite truck	0.00000	0.00000	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)
P4.1 Architectural Coating	86,467.5	28,822.5	0.00000	0.00000	340.000

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
P4.1 Paving	0.00000	0.00000	0.00000	0.00000	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
P4.1 Paving	Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	531.983	0.03300	0.00400
2028	0.00000	531.983	0.03300	0.00400

2029	0.00000	531.983	0.03300	0.00400

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Based on applicant information, see assumptions file
Construction: Construction Phases	Based on applicant information, see assumptions file
Construction: Off-Road Equipment	Phase 4.1 equipment mix based on acreage of 0.76 acres, does not assume shared equipment with other development phases, finishing and landscaping based on previous residential development projects.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	1.31579	0.76000
Building Area	sq. ft	48,000.0	42,700.0
Landscape Area	sq. ft	—	16,660.0
Special Landscape Area	sq. ft	—	0.00000

CalEEMod Unmitigated and Mitigated Construction Model P4.2

5600 Beach Boulevard Residential Development Project, Townhomes and Duets Site Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

3. Construction Emissions Details

3.1. P4.2 Building Construction (Townhomes and Duet Homes) (2028) - Unmitigated

3.2. P4.2 Building Construction (Townhomes and Duet Homes) (2028) - Mitigated

3.3. P4.2 Building Construction (Townhomes and Duet Homes) (2029) - Unmitigated

3.4. P4.2 Building Construction (Townhomes and Duet Homes) (2029) - Mitigated

3.5. P4.2 Building Construction (Townhomes and Duet Homes) (2030) - Unmitigated

3.6. P4.2 Building Construction (Townhomes and Duet Homes) (2030) - Mitigated

3.7. P4.2 Paving (2030) - Unmitigated

3.8. P4.2 Paving (2030) - Mitigated

3.9. P4.2 Architectural Coating (2030) - Unmitigated

3.10. P4.2 Architectural Coating (2030) - Mitigated

3.11. P4.2 Finishing and Landscaping (2030) - Unmitigated

3.12. P4.2 Finishing and Landscaping (2030) - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.8. Architectural Coatings

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	5600 Beach Boulevard Residential Development Project, Townhomes and Duets Site
Construction Start Date	5/1/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	18.8000
Location	5600 Beach Blvd, Buena Park, CA 90621, USA
County	Orange
City	Buena Park
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5798
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.37

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse High Rise	114.000	Dwelling Unit	5.13000	317,721	86,131.0	—	340.000	—

Condo/Townhouse High Rise	117.000	Dwelling Unit	5.10000	349,216	65,704.0	—	349.000	—
Health Club	0.44000	1000sqft	0.01010	437.000	0.00000	—	—	—
Other Non-Asphalt Surfaces	9.53000	1000sqft	0.21878	0.00000	0.00000	—	—	—
Other Asphalt Surfaces	110.610	1000sqft	2.53926	0.00000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

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.	100.841	100.371	17.4089	34.7810	0.04736	0.51462	3.06937	3.58399	0.47393	0.72905	1.20298	—	7,689.68	7,689.68	0.23251	0.15559	7.68080	7,749.44
Mit.	20.9369	20.7829	7.84421	37.4896	0.04736	0.11465	3.06937	3.18403	0.11222	0.72905	0.84127	—	7,689.68	7,689.68	0.23251	0.15559	7.68080	7,749.44
% Reduced	79%	79%	55%	-8%	—	78%	—	11%	76%	—	30%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	100.841	100.365	17.5364	33.5071	0.04736	0.51462	3.06937	3.58399	0.47393	0.72905	1.20298	—	7,562.94	7,562.94	0.23730	0.20244	0.19895	7,615.44
Mit.	20.9369	20.7775	7.97169	36.2157	0.04736	0.11465	3.06937	3.18403	0.11222	0.72905	0.84127	—	7,562.94	7,562.94	0.23730	0.20244	0.19895	7,615.44

% Reduced	79%	79%	55%	-8%	—	78%	—	11%	76%	—	30%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.6766	12.4822	6.95902	14.1643	0.02069	0.20087	1.68559	1.88645	0.18511	0.40112	0.58624	—	3,648.49	3,648.49	0.11209	0.14459	2.10947	3,696.49
Mit.	2.89319	2.81382	2.83786	15.5357	0.02069	0.05669	1.68559	1.74227	0.05493	0.40112	0.45606	—	3,648.49	3,648.49	0.11209	0.14459	2.10947	3,696.49
% Reduced	77%	77%	59%	-10%	—	72%	—	8%	70%	—	22%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.31348	2.27800	1.27002	2.58499	0.00378	0.03666	0.30762	0.34428	0.03378	0.07320	0.10699	—	604.049	604.049	0.01856	0.02394	0.34925	611.996
Mit.	0.52801	0.51352	0.51791	2.83527	0.00378	0.01035	0.30762	0.31796	0.01003	0.07320	0.08323	—	604.049	604.049	0.01856	0.02394	0.34925	611.996
% Reduced	77%	77%	59%	-10%	—	72%	—	8%	70%	—	22%	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.77912	1.46751	10.0817	21.0679	0.02897	0.30581	2.38825	2.69406	0.28179	0.56868	0.85047	—	5,235.80	5,235.80	0.15695	0.13453	7.68080	5,287.49
2029	1.72932	1.42653	9.70253	20.5586	0.02896	0.28121	2.38825	2.66946	0.25916	0.56868	0.82784	—	5,180.09	5,180.09	0.15692	0.13452	6.83553	5,230.94
2030	100.841	100.371	17.4089	34.7810	0.04736	0.51462	3.06937	3.58399	0.47393	0.72905	1.20298	—	7,689.68	7,689.68	0.23251	0.15559	7.57918	7,749.44
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.77436	1.46384	10.1891	19.9803	0.02897	0.30581	2.38825	2.69406	0.28179	0.56868	0.85047	—	5,135.25	5,135.25	0.16117	0.20244	0.19895	5,199.80
2029	1.72456	1.41865	9.74307	19.5274	0.02896	0.28121	2.38825	2.66946	0.25916	0.56868	0.82784	—	5,081.37	5,081.37	0.15692	0.20243	0.17685	5,145.79
2030	100.841	100.365	17.5364	33.5071	0.04736	0.51462	3.06937	3.58399	0.47393	0.72905	1.20298	—	7,562.94	7,562.94	0.23730	0.15559	0.19728	7,615.44

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.85274	0.70386	4.88522	9.72272	0.01389	0.14662	1.13142	1.27804	0.13510	0.26925	0.40435	—	2,475.05	2,475.05	0.07727	0.09706	1.59228	2,507.50
2029	1.22960	1.01109	6.95902	14.1643	0.02069	0.20087	1.68559	1.88645	0.18511	0.40112	0.58624	—	3,648.49	3,648.49	0.11209	0.14459	2.10947	3,696.49
2030	12.6766	12.4822	6.61013	13.2817	0.01940	0.18739	1.48316	1.67055	0.17266	0.35274	0.52540	—	3,306.60	3,306.60	0.10017	0.07985	1.63055	3,334.53
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.15563	0.12846	0.89155	1.77440	0.00253	0.02676	0.20648	0.23324	0.02466	0.04914	0.07379	—	409.773	409.773	0.01279	0.01607	0.26362	415.145
2029	0.22440	0.18452	1.27002	2.58499	0.00378	0.03666	0.30762	0.34428	0.03378	0.07320	0.10699	—	604.049	604.049	0.01856	0.02394	0.34925	611.996
2030	2.31348	2.27800	1.20635	2.42391	0.00354	0.03420	0.27068	0.30488	0.03151	0.06437	0.09589	—	547.445	547.445	0.01658	0.01322	0.26996	552.070

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.94301	0.80423	3.97111	22.9546	0.02897	0.07969	2.38825	2.46794	0.07721	0.56868	0.64588	—	5,235.80	5,235.80	0.15695	0.13453	7.68080	5,287.49
2029	0.92435	0.78930	3.93290	22.4785	0.02896	0.07936	2.38825	2.46761	0.07691	0.56868	0.64559	—	5,180.09	5,180.09	0.15692	0.13452	6.83553	5,230.94
2030	20.9369	20.7829	7.84421	37.4896	0.04736	0.11465	3.06937	3.18403	0.11222	0.72905	0.84127	—	7,689.68	7,689.68	0.23251	0.15559	7.57918	7,749.44
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.93825	0.80056	4.07847	21.8670	0.02897	0.07969	2.38825	2.46794	0.07721	0.56868	0.64588	—	5,135.25	5,135.25	0.16117	0.20244	0.19895	5,199.80
2029	0.91959	0.78141	3.97343	21.4474	0.02896	0.07936	2.38825	2.46761	0.07691	0.56868	0.64559	—	5,081.37	5,081.37	0.15692	0.20243	0.17685	5,145.79
2030	20.9369	20.7775	7.97169	36.2157	0.04736	0.11465	3.06937	3.18403	0.11222	0.72905	0.84127	—	7,562.94	7,562.94	0.23730	0.15559	0.19728	7,615.44
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.45187	0.38585	1.95548	10.6273	0.01389	0.03821	1.13142	1.16963	0.03702	0.26925	0.30626	—	2,475.05	2,475.05	0.07727	0.09706	1.59228	2,507.50
2029	0.65462	0.55592	2.83786	15.5357	0.02069	0.05669	1.68559	1.74227	0.05493	0.40112	0.45606	—	3,648.49	3,648.49	0.11209	0.14459	2.10947	3,696.49
2030	2.89319	2.81382	2.82030	14.5245	0.01940	0.05124	1.48316	1.53441	0.04980	0.35274	0.40253	—	3,306.60	3,306.60	0.10017	0.07985	1.63055	3,334.53

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.08247	0.07042	0.35688	1.93948	0.00253	0.00697	0.20648	0.21346	0.00676	0.04914	0.05589	—	409.773	409.773	0.01279	0.01607	0.26362	415.145
2029	0.11947	0.10146	0.51791	2.83527	0.00378	0.01035	0.30762	0.31796	0.01003	0.07320	0.08323	—	604.049	604.049	0.01856	0.02394	0.34925	611.996
2030	0.52801	0.51352	0.51471	2.65072	0.00354	0.00935	0.27068	0.28003	0.00909	0.06437	0.07346	—	547.445	547.445	0.01658	0.01322	0.26996	552.070

3. Construction Emissions Details

3.1. P4.2 Building Construction (Townhomes and Duet Homes) (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	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.56806	0.47534	4.27909	6.20183	0.01122	0.14395	—	0.14395	0.13243	—	0.13243	—	1,149.47	1,149.47	0.04663	0.00933	—	1,153.41
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10367	0.08675	0.78093	1.13183	0.00205	0.02627	—	0.02627	0.02417	—	0.02417	—	190.307	190.307	0.00772	0.00154	—	190.960
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53960	0.46068	0.42765	7.76736	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	2,093.62	2,093.62	0.02202	0.01101	6.04026	2,103.49
Vendor	0.05471	0.01540	0.72911	0.36526	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	744.724	744.724	0.03767	0.10406	1.64053	778.317
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53593	0.45701	0.50290	6.67163	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	1,992.65	1,992.65	0.02570	0.07892	0.15635	2,016.97
Vendor	0.05362	0.01540	0.76121	0.37345	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	745.140	745.140	0.03822	0.10406	0.04261	777.149
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25871	0.22088	0.24111	3.34392	0.00000	0.00000	1.03086	1.03086	0.00000	0.24144	0.24144	—	968.439	968.439	0.01232	0.03784	1.25246	981.276
Vendor	0.02597	0.00764	0.36502	0.17696	0.00267	0.00267	0.10056	0.10323	0.00267	0.02781	0.03048	—	357.144	357.144	0.01832	0.04989	0.33982	372.810
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04722	0.04031	0.04400	0.61027	0.00000	0.00000	0.18813	0.18813	0.00000	0.04406	0.04406	—	160.336	160.336	0.00204	0.00626	0.20736	162.461

Vendor	0.00474	0.00139	0.06662	0.03230	0.00049	0.00049	0.01835	0.01884	0.00049	0.00508	0.00556	—	59.1292	59.1292	0.00303	0.00826	0.05626	61.7229
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. P4.2 Building Construction (Townhomes and Duet Homes) (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	0.34870	0.32816	2.81436	14.8220	0.02340	0.07412	—	0.07412	0.07164	—	0.07164	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34870	0.32816	2.81436	14.8220	0.02340	0.07412	—	0.07412	0.07164	—	0.07164	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16719	0.15733	1.34935	7.10641	0.01122	0.03554	—	0.03554	0.03435	—	0.03435	—	1,149.47	1,149.47	0.04663	0.00933	—	1,153.41
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03051	0.02871	0.24626	1.29692	0.00205	0.00649	—	0.00649	0.00627	—	0.00627	—	190.307	190.307	0.00772	0.00154	—	190.960
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53960	0.46068	0.42765	7.76736	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	2,093.62	2,093.62	0.02202	0.01101	6.04026	2,103.49
Vendor	0.05471	0.01540	0.72911	0.36526	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	744.724	744.724	0.03767	0.10406	1.64053	778.317
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53593	0.45701	0.50290	6.67163	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	1,992.65	1,992.65	0.02570	0.07892	0.15635	2,016.97
Vendor	0.05362	0.01540	0.76121	0.37345	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	745.140	745.140	0.03822	0.10406	0.04261	777.149
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25871	0.22088	0.24111	3.34392	0.00000	0.00000	1.03086	1.03086	0.00000	0.24144	0.24144	—	968.439	968.439	0.01232	0.03784	1.25246	981.276
Vendor	0.02597	0.00764	0.36502	0.17696	0.00267	0.00267	0.10056	0.10323	0.00267	0.02781	0.03048	—	357.144	357.144	0.01832	0.04989	0.33982	372.810
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04722	0.04031	0.04400	0.61027	0.00000	0.00000	0.18813	0.18813	0.00000	0.04406	0.04406	—	160.336	160.336	0.00204	0.00626	0.20736	162.461
Vendor	0.00474	0.00139	0.06662	0.03230	0.00049	0.00049	0.01835	0.01884	0.00049	0.00508	0.00556	—	59.1292	59.1292	0.00303	0.00826	0.05626	61.7229
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. P4.2 Building Construction (Townhomes and Duet Homes) (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	1.15336	0.96514	8.58166	12.9012	0.02340	0.27564	—	0.27564	0.25359	—	0.25359	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15336	0.96514	8.58166	12.9012	0.02340	0.27564	—	0.27564	0.25359	—	0.25359	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82383	0.68938	6.12975	9.21517	0.01671	0.19689	—	0.19689	0.18114	—	0.18114	—	1,712.02	1,712.02	0.06945	0.01389	—	1,717.90
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15035	0.12581	1.11868	1.68177	0.00305	0.03593	—	0.03593	0.03306	—	0.03306	—	283.445	283.445	0.01150	0.00230	—	284.418
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.52125	0.44600	0.42397	7.30484	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	2,058.27	2,058.27	0.02202	0.01101	5.37020	2,067.48
Vendor	0.05471	0.01540	0.69690	0.35249	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	724.987	724.987	0.03767	0.10406	1.46533	758.405
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51758	0.43866	0.43132	6.26601	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	1,959.12	1,959.12	0.02202	0.07892	0.13887	1,983.33
Vendor	0.05362	0.01485	0.73009	0.36013	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	725.415	725.415	0.03767	0.10406	0.03799	757.407
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36708	0.31070	0.30808	4.69466	0.00000	0.00000	1.53577	1.53577	0.00000	0.35969	0.35969	—	1,418.49	1,418.49	0.01573	0.05637	1.65781	1,437.34
Vendor	0.03869	0.01100	0.52118	0.25451	0.00398	0.00398	0.14981	0.15379	0.00398	0.04143	0.04541	—	517.977	517.977	0.02691	0.07433	0.45166	541.253
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06699	0.05670	0.05623	0.85678	0.00000	0.00000	0.28028	0.28028	0.00000	0.06564	0.06564	—	234.847	234.847	0.00260	0.00933	0.27447	237.968
Vendor	0.00706	0.00201	0.09512	0.04645	0.00073	0.00073	0.02734	0.02807	0.00073	0.00756	0.00829	—	85.7570	85.7570	0.00446	0.01231	0.07478	89.6105
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. P4.2 Building Construction (Townhomes and Duet Homes) (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	0.34840	0.32790	2.81203	14.8212	0.02340	0.07379	—	0.07379	0.07134	—	0.07134	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34840	0.32790	2.81203	14.8212	0.02340	0.07379	—	0.07379	0.07134	—	0.07134	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24885	0.23422	2.00859	10.5866	0.01671	0.05271	—	0.05271	0.05096	—	0.05096	—	1,712.02	1,712.02	0.06945	0.01389	—	1,717.90
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04542	0.04274	0.36657	1.93205	0.00305	0.00962	—	0.00962	0.00930	—	0.00930	—	283.445	283.445	0.01150	0.00230	—	284.418
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52125	0.44600	0.42397	7.30484	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	2,058.27	2,058.27	0.02202	0.01101	5.37020	2,067.48
Vendor	0.05471	0.01540	0.69690	0.35249	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	724.987	724.987	0.03767	0.10406	1.46533	758.405
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.51758	0.43866	0.43132	6.26601	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	1,959.12	1,959.12	0.02202	0.07892	0.13887	1,983.33
Vendor	0.05362	0.01485	0.73009	0.36013	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	725.415	725.415	0.03767	0.10406	0.03799	757.407
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36708	0.31070	0.30808	4.69466	0.00000	0.00000	1.53577	1.53577	0.00000	0.35969	0.35969	—	1,418.49	1,418.49	0.01573	0.05637	1.65781	1,437.34
Vendor	0.03869	0.01100	0.52118	0.25451	0.00398	0.00398	0.14981	0.15379	0.00398	0.04143	0.04541	—	517.977	517.977	0.02691	0.07433	0.45166	541.253
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06699	0.05670	0.05623	0.85678	0.00000	0.00000	0.28028	0.28028	0.00000	0.06564	0.06564	—	234.847	234.847	0.00260	0.00933	0.27447	237.968
Vendor	0.00706	0.00201	0.09512	0.04645	0.00073	0.00073	0.02734	0.02807	0.00073	0.00756	0.00829	—	85.7570	85.7570	0.00446	0.01231	0.07478	89.6105
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. P4.2 Building Construction (Townhomes and Duet Homes) (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	1.12372	0.94034	8.39196	12.8848	0.02340	0.26012	—	0.26012	0.23931	—	0.23931	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.12372	0.94034	8.39196	12.8848	0.02340	0.26012	—	0.26012	0.23931	—	0.23931	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66852	0.55942	4.99248	7.66530	0.01392	0.15475	—	0.15475	0.14237	—	0.14237	—	1,425.90	1,425.90	0.05784	0.01157	—	1,430.80
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12200	0.10209	0.91113	1.39892	0.00254	0.02824	—	0.02824	0.02598	—	0.02598	—	236.075	236.075	0.00958	0.00192	—	236.885
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50290	0.42765	0.35239	6.91390	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	2,025.33	2,025.33	0.01835	0.01101	4.73898	2,033.81
Vendor	0.04805	0.01540	0.67134	0.34026	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	703.525	703.525	0.03210	0.09850	1.29013	734.970
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50290	0.42397	0.42765	5.93197	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	1,927.86	1,927.86	0.02202	0.01101	0.12333	1,931.81
Vendor	0.04805	0.01485	0.69843	0.34736	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	703.965	703.965	0.03210	0.09850	0.03361	734.153
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29700	0.25223	0.25441	3.71135	0.00000	0.00000	1.27911	1.27911	0.00000	0.29958	0.29958	—	1,162.55	1,162.55	0.01310	0.00655	1.21899	1,166.05
Vendor	0.02858	0.00916	0.41856	0.20437	0.00331	0.00331	0.12477	0.12809	0.00331	0.03451	0.03782	—	418.646	418.646	0.01910	0.05860	0.33259	436.918
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05420	0.04603	0.04643	0.67732	0.00000	0.00000	0.23344	0.23344	0.00000	0.05467	0.05467	—	192.473	192.473	0.00217	0.00108	0.20182	193.052
Vendor	0.00522	0.00167	0.07639	0.03730	0.00060	0.00060	0.02277	0.02338	0.00060	0.00630	0.00690	—	69.3116	69.3116	0.00316	0.00970	0.05506	72.3367
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. P4.2 Building Construction (Townhomes and Duet Homes) (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	0.34818	0.32773	2.81033	14.8208	0.02340	0.07353	—	0.07353	0.07109	—	0.07109	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34818	0.32773	2.81033	14.8208	0.02340	0.07353	—	0.07353	0.07109	—	0.07109	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20714	0.19497	1.67190	8.81708	0.01392	0.04374	—	0.04374	0.04229	—	0.04229	—	1,425.90	1,425.90	0.05784	0.01157	—	1,430.80
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03780	0.03558	0.30512	1.60912	0.00254	0.00798	—	0.00798	0.00772	—	0.00772	—	236.075	236.075	0.00958	0.00192	—	236.885
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50290	0.42765	0.35239	6.91390	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	2,025.33	2,025.33	0.01835	0.01101	4.73898	2,033.81
Vendor	0.04805	0.01540	0.67134	0.34026	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	703.525	703.525	0.03210	0.09850	1.29013	734.970
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50290	0.42397	0.42765	5.93197	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	1,927.86	1,927.86	0.02202	0.01101	0.12333	1,931.81
Vendor	0.04805	0.01485	0.69843	0.34736	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	703.965	703.965	0.03210	0.09850	0.03361	734.153
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29700	0.25223	0.25441	3.71135	0.00000	0.00000	1.27911	1.27911	0.00000	0.29958	0.29958	—	1,162.55	1,162.55	0.01310	0.00655	1.21899	1,166.05
Vendor	0.02858	0.00916	0.41856	0.20437	0.00331	0.00331	0.12477	0.12809	0.00331	0.03451	0.03782	—	418.646	418.646	0.01910	0.05860	0.33259	436.918
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05420	0.04603	0.04643	0.67732	0.00000	0.00000	0.23344	0.23344	0.00000	0.05467	0.05467	—	192.473	192.473	0.00217	0.00108	0.20182	193.052
Vendor	0.00522	0.00167	0.07639	0.03730	0.00060	0.00060	0.02277	0.02338	0.00060	0.00630	0.00690	—	69.3116	69.3116	0.00316	0.00970	0.05506	72.3367
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. P4.2 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76655	0.64411	6.28020	9.89564	0.01395	0.22035	—	0.22035	0.20272	—	0.20272	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.15472	0.15472	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76655	0.64411	6.28020	9.89564	0.01395	0.22035	—	0.22035	0.20272	—	0.20272	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.15472	0.15472	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09031	0.07588	0.73986	1.16579	0.00164	0.02596	—	0.02596	0.02388	—	0.02388	—	177.964	177.964	0.00722	0.00144	—	178.575

Paving	0.01823	0.01823	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01648	0.01385	0.13502	0.21276	0.00030	0.00474	—	0.00474	0.00436	—	0.00436	—	29.4640	29.4640	0.00120	0.00024	—	29.5651
Paving	0.00333	0.00333	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04530	0.03853	0.03175	0.62286	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	182.459	182.459	0.00165	0.00099	0.42693	183.222
Vendor	0.00388	0.00124	0.05422	0.02748	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	56.8149	56.8149	0.00259	0.00795	0.10419	59.3543
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04530	0.03820	0.03853	0.53440	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	173.677	173.677	0.00198	0.00099	0.01111	174.033
Vendor	0.00388	0.00120	0.05640	0.02805	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	56.8504	56.8504	0.00259	0.00795	0.00271	59.2883
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00530	0.00450	0.00454	0.06621	0.00000	0.00000	0.02282	0.02282	0.00000	0.00534	0.00534	—	20.7396	20.7396	0.00023	0.00012	0.02175	20.8021
Vendor	0.00046	0.00015	0.00669	0.00327	0.00005	0.00005	0.00200	0.00205	0.00005	0.00055	0.00060	—	6.69503	6.69503	0.00031	0.00094	0.00532	6.98723
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00097	0.00082	0.00083	0.01208	0.00000	0.00000	0.00416	0.00416	0.00000	0.00098	0.00098	—	3.43368	3.43368	0.00004	0.00002	0.00360	3.44402
Vendor	0.00008	0.00003	0.00122	0.00060	0.00001	0.00001	0.00036	0.00037	0.00001	0.00010	0.00011	—	1.10844	1.10844	0.00005	0.00016	0.00088	1.15682

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8. P4.2 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15994	0.15994	1.93286	10.6002	0.01395	0.02813	—	0.02813	0.02813	—	0.02813	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.15472	0.15472	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15994	0.15994	1.93286	10.6002	0.01395	0.02813	—	0.02813	0.02813	—	0.02813	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.15472	0.15472	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01884	0.01884	0.22771	1.24879	0.00164	0.00331	—	0.00331	0.00331	—	0.00331	—	177.964	177.964	0.00722	0.00144	—	178.575
Paving	0.01823	0.01823	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00344	0.00344	0.04156	0.22790	0.00030	0.00060	—	0.00060	0.00060	—	0.00060	—	29.4640	29.4640	0.00120	0.00024	—	29.5651
Paving	0.00333	0.00333	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04530	0.03853	0.03175	0.62286	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	182.459	182.459	0.00165	0.00099	0.42693	183.222
Vendor	0.00388	0.00124	0.05422	0.02748	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	56.8149	56.8149	0.00259	0.00795	0.10419	59.3543
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04530	0.03820	0.03853	0.53440	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	173.677	173.677	0.00198	0.00099	0.01111	174.033
Vendor	0.00388	0.00120	0.05640	0.02805	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	56.8504	56.8504	0.00259	0.00795	0.00271	59.2883
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00530	0.00450	0.00454	0.06621	0.00000	0.00000	0.02282	0.02282	0.00000	0.00534	0.00534	—	20.7396	20.7396	0.00023	0.00012	0.02175	20.8021
Vendor	0.00046	0.00015	0.00669	0.00327	0.00005	0.00005	0.00200	0.00205	0.00005	0.00055	0.00060	—	6.69503	6.69503	0.00031	0.00094	0.00532	6.98723
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00097	0.00082	0.00083	0.01208	0.00000	0.00000	0.00416	0.00416	0.00000	0.00098	0.00098	—	3.43368	3.43368	0.00004	0.00002	0.00360	3.44402
Vendor	0.00008	0.00003	0.00122	0.00060	0.00001	0.00001	0.00036	0.00037	0.00001	0.00010	0.00011	—	1.10844	1.10844	0.00005	0.00016	0.00088	1.15682
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. P4.2 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11905	0.09839	0.78473	1.10719	0.00173	0.01097	—	0.01097	0.01009	—	0.01009	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	97.9032	97.9032	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11905	0.09839	0.78473	1.10719	0.00173	0.01097	—	0.01097	0.01009	—	0.01009	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	97.9032	97.9032	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01403	0.01159	0.09245	0.13044	0.00020	0.00129	—	0.00129	0.00119	—	0.00119	—	15.7289	15.7289	0.00064	0.00013	—	15.7829

Architect Coatings	11.5338	11.5338	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00256	0.00212	0.01687	0.02380	0.00004	0.00024	—	0.00024	0.00022	—	0.00022	—	2.60410	2.60410	0.00011	0.00002	—	2.61304
Architectural Coatings	2.10492	2.10492	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10058	0.08553	0.07048	1.38278	0.00000	0.00000	0.43527	0.43527	0.00000	0.10203	0.10203	—	405.067	405.067	0.00367	0.00220	0.94780	406.763
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10058	0.08479	0.08553	1.18639	0.00000	0.00000	0.43527	0.43527	0.00000	0.10203	0.10203	—	385.571	385.571	0.00440	0.00220	0.02467	386.362
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01176	0.00999	0.01008	0.14699	0.00000	0.00000	0.05066	0.05066	0.00000	0.01186	0.01186	—	46.0430	46.0430	0.00052	0.00026	0.04828	46.1816
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00215	0.00182	0.00184	0.02683	0.00000	0.00000	0.00925	0.00925	0.00000	0.00217	0.00217	—	7.62294	7.62294	0.00009	0.00004	0.00799	7.64588
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10. P4.2 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02114	0.02114	0.64604	0.96319	0.00173	0.00235	—	0.00235	0.00235	—	0.00235	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	19.5029	19.5029	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02114	0.02114	0.64604	0.96319	0.00173	0.00235	—	0.00235	0.00235	—	0.00235	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	19.5029	19.5029	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00249	0.00249	0.07611	0.11347	0.00020	0.00028	—	0.00028	0.00028	—	0.00028	—	15.7289	15.7289	0.00064	0.00013	—	15.7829
Architectural Coatings	2.29760	2.29760	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00045	0.00045	0.01389	0.02071	0.00004	0.00005	—	0.00005	0.00005	—	0.00005	—	2.60410	2.60410	0.00011	0.00002	—	2.61304
Architectural Coatings	0.41931	0.41931	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10058	0.08553	0.07048	1.38278	0.00000	0.00000	0.43527	0.43527	0.00000	0.10203	0.10203	—	405.067	405.067	0.00367	0.00220	0.94780	406.763
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10058	0.08479	0.08553	1.18639	0.00000	0.00000	0.43527	0.43527	0.00000	0.10203	0.10203	—	385.571	385.571	0.00440	0.00220	0.02467	386.362
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01176	0.00999	0.01008	0.14699	0.00000	0.00000	0.05066	0.05066	0.00000	0.01186	0.01186	—	46.0430	46.0430	0.00052	0.00026	0.04828	46.1816
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00215	0.00182	0.00184	0.02683	0.00000	0.00000	0.00925	0.00925	0.00000	0.00217	0.00217	—	7.62294	7.62294	0.00009	0.00004	0.00799	7.64588
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. P4.2 Finishing and Landscaping (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	0.06584	0.05532	0.76659	1.50227	0.00226	0.01716	—	0.01716	0.01579	—	0.01579	—	245.104	245.104	0.00994	0.00199	—	245.945
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06584	0.05532	0.76659	1.50227	0.00226	0.01716	—	0.01716	0.01579	—	0.01579	—	245.104	245.104	0.00994	0.00199	—	245.945
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00776	0.00652	0.09031	0.17698	0.00027	0.00202	—	0.00202	0.00186	—	0.00186	—	28.8753	28.8753	0.00117	0.00023	—	28.9744
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00142	0.00119	0.01648	0.03230	0.00005	0.00037	—	0.00037	0.00034	—	0.00034	—	4.78064	4.78064	0.00019	0.00004	—	4.79704
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00755	0.00642	0.00529	0.10381	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	30.4098	30.4098	0.00028	0.00017	0.07115	30.5371
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00755	0.00637	0.00642	0.08907	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	28.9462	28.9462	0.00033	0.00017	0.00185	29.0056
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00088	0.00075	0.00076	0.01103	0.00000	0.00000	0.00380	0.00380	0.00000	0.00089	0.00089	—	3.45661	3.45661	0.00004	0.00002	0.00362	3.46701
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00016	0.00014	0.00014	0.00201	0.00000	0.00000	0.00069	0.00069	0.00000	0.00016	0.00016	—	0.57228	0.57228	0.00001	< 0.000005	0.00060	0.57400
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.12. P4.2 Finishing and Landscaping (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	0.04170	0.04170	1.26951	1.71430	0.00226	0.00463	—	0.00463	0.00463	—	0.00463	—	245.104	245.104	0.00994	0.00199	—	245.945
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04170	0.04170	1.26951	1.71430	0.00226	0.00463	—	0.00463	0.00463	—	0.00463	—	245.104	245.104	0.00994	0.00199	—	245.945
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00491	0.00491	0.14956	0.20196	0.00027	0.00055	—	0.00055	0.00055	—	0.00055	—	28.8753	28.8753	0.00117	0.00023	—	28.9744
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00090	0.00090	0.02729	0.03686	0.00005	0.00010	—	0.00010	0.00010	—	0.00010	—	4.78064	4.78064	0.00019	0.00004	—	4.79704
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00755	0.00642	0.00529	0.10381	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	30.4098	30.4098	0.00028	0.00017	0.07115	30.5371
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00755	0.00637	0.00642	0.08907	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	28.9462	28.9462	0.00033	0.00017	0.00185	29.0056
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00088	0.00075	0.00076	0.01103	0.00000	0.00000	0.00380	0.00380	0.00000	0.00089	0.00089	—	3.45661	3.45661	0.00004	0.00002	0.00362	3.46701
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00016	0.00014	0.00014	0.00201	0.00000	0.00000	0.00069	0.00069	0.00000	0.00016	0.00016	—	0.57228	0.57228	0.00001	< 0.000005	0.00060	0.57400
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
P4.2 Building Construction (Townhomes and Duet Homes)	Building Construction	5/1/2028	10/31/2030	5.00000	654.000	—
P4.2 Paving	Paving	9/3/2030	10/31/2030	5.00000	43.0000	—
P4.2 Architectural Coating	Architectural Coating	9/3/2030	10/31/2030	5.00000	43.0000	—
P4.2 Finishing and Landscaping	Trenching	9/3/2030	10/31/2030	5.00000	43.0000	—

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
P4.2 Building Construction (Townhomes and Duet Homes)	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
P4.2 Building Construction (Townhomes and Duet Homes)	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
P4.2 Building Construction (Townhomes and Duet Homes)	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
P4.2 Building Construction (Townhomes and Duet Homes)	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000

P4.2 Building Construction (Townhomes and Duet Homes)	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
P4.2 Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
P4.2 Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
P4.2 Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
P4.2 Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000
P4.2 Finishing and Landscaping	Skid Steer Loaders	Diesel	Average	1.000000	8.00000	71.0000	0.37000

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
P4.2 Building Construction (Townhomes and Duet Homes)	Cranes	Diesel	Tier 4 Final	1.000000	7.00000	367.000	0.29000
P4.2 Building Construction (Townhomes and Duet Homes)	Forklifts	Diesel	Tier 4 Final	3.00000	8.00000	82.0000	0.20000
P4.2 Building Construction (Townhomes and Duet Homes)	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
P4.2 Building Construction (Townhomes and Duet Homes)	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00000	7.00000	84.0000	0.37000
P4.2 Building Construction (Townhomes and Duet Homes)	Welders	Diesel	Tier 4 Final	1.000000	8.00000	46.0000	0.45000
P4.2 Paving	Pavers	Diesel	Tier 4 Final	2.00000	8.00000	81.0000	0.42000

P4.2 Paving	Paving Equipment	Diesel	Tier 4 Final	2.00000	8.00000	89.0000	0.36000
P4.2 Paving	Rollers	Diesel	Tier 4 Final	2.00000	8.00000	36.0000	0.38000
P4.2 Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.000000	6.00000	37.0000	0.48000
P4.2 Finishing and Landscaping	Skid Steer Loaders	Diesel	Tier 4 Final	1.000000	8.00000	71.0000	0.37000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
P4.2 Building Construction (Townhomes and Duet Homes)	Worker	166.504	18.5000	LDA,LDT1,LDT2
P4.2 Building Construction (Townhomes and Duet Homes)	Vendor	24.7655	10.2000	HHDT,MHDT
P4.2 Building Construction (Townhomes and Duet Homes)	Hauling	0.00000	20.0000	HHDT
P4.2 Building Construction (Townhomes and Duet Homes)	Onsite truck	0.00000	0.00000	HHDT
P4.2 Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
P4.2 Paving	Vendor	2.00000	10.2000	HHDT,MHDT
P4.2 Paving	Hauling	0.00000	20.0000	HHDT
P4.2 Paving	Onsite truck	0.00000	0.00000	HHDT
P4.2 Architectural Coating	Worker	33.3007	18.5000	LDA,LDT1,LDT2
P4.2 Architectural Coating	Vendor	0.00000	10.2000	HHDT,MHDT
P4.2 Architectural Coating	Hauling	0.00000	20.0000	HHDT
P4.2 Architectural Coating	Onsite truck	0.00000	0.00000	HHDT
P4.2 Finishing and Landscaping	Worker	2.50000	18.5000	LDA,LDT1,LDT2
P4.2 Finishing and Landscaping	Vendor	0.00000	10.2000	HHDT,MHDT
P4.2 Finishing and Landscaping	Hauling	0.00000	20.0000	HHDT

P4.2 Finishing and Landscaping	Onsite truck	0.00000	0.00000	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
P4.2 Building Construction (Townhomes and Duet Homes)	Worker	166.504	18.5000	LDA,LDT1,LDT2
P4.2 Building Construction (Townhomes and Duet Homes)	Vendor	24.7655	10.2000	HHDT,MHDT
P4.2 Building Construction (Townhomes and Duet Homes)	Hauling	0.00000	20.0000	HHDT
P4.2 Building Construction (Townhomes and Duet Homes)	Onsite truck	0.00000	0.00000	HHDT
P4.2 Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
P4.2 Paving	Vendor	2.00000	10.2000	HHDT,MHDT
P4.2 Paving	Hauling	0.00000	20.0000	HHDT
P4.2 Paving	Onsite truck	0.00000	0.00000	HHDT
P4.2 Architectural Coating	Worker	33.3007	18.5000	LDA,LDT1,LDT2
P4.2 Architectural Coating	Vendor	0.00000	10.2000	HHDT,MHDT
P4.2 Architectural Coating	Hauling	0.00000	20.0000	HHDT
P4.2 Architectural Coating	Onsite truck	0.00000	0.00000	HHDT
P4.2 Finishing and Landscaping	Worker	2.50000	18.5000	LDA,LDT1,LDT2
P4.2 Finishing and Landscaping	Vendor	0.00000	10.2000	HHDT,MHDT
P4.2 Finishing and Landscaping	Hauling	0.00000	20.0000	HHDT
P4.2 Finishing and Landscaping	Onsite truck	0.00000	0.00000	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)
P4.2 Architectural Coating	1,350,547	450,182	655.500	218.500	7,208.40

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
P4.2 Paving	0.00000	0.00000	0.00000	0.00000	2.75803

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
P4.2 Paving	Condo/Townhouse High Rise	—	0%
P4.2 Paving	Condo/Townhouse High Rise	—	0%
P4.2 Paving	Health Club	0.00000	0%
P4.2 Paving	Other Non-Asphalt Surfaces	0.21878	0%
P4.2 Paving	Other Asphalt Surfaces	2.53926	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00000	531.983	0.03300	0.00400
2029	0.00000	531.983	0.03300	0.00400
2030	0.00000	531.983	0.03300	0.00400

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Based on applicant information, see assumptions file
Construction: Construction Phases	Based on applicant information, see assumptions file
Construction: Off-Road Equipment	Phase 4.2 equipment mix based on acreage of 13.0 acres, does not assume shared equipment with other development phases, finishing and landscaping based on previous residential development projects.
Construction: Architectural Coatings	South Coast AQMD Rule 1113

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	1.78125	5.13000
Building Area	sq. ft	109,440	317,721
Landscape Area	sq. ft	—	86,131.0
Lot Area	acre	1.82813	5.10000
Building Area	sq. ft	112,320	349,216
Landscape Area	sq. ft	—	65,704.0
Building Area	sq. ft	440.000	437.000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.8. Architectural Coatings

Phase Name	Model Parameter	Units	Default Value	New Value
P4.2 Architectural Coating	Non-Residential Interior VOC	g/L	100.0000	50.0000
P4.2 Architectural Coating	Non-Residential Exterior VOC	g/L	100.0000	50.0000

5600 Beach Boulevard Residential Development Project, Townhomes and Duets Site Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.3. Construction Emissions by Year, Mitigated

3. Construction Emissions Details

3.2. P4.2 Building Construction (Townhomes and Duet Homes) (2028) - Mitigated

3.4. P4.2 Building Construction (Townhomes and Duet Homes) (2029) - Mitigated

3.6. P4.2 Building Construction (Townhomes and Duet Homes) (2030) - Mitigated

3.8. P4.2 Paving (2030) - Mitigated

3.10. P4.2 Architectural Coating (2030) - Mitigated

3.12. P4.2 Finishing and Landscaping (2030) - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.8. Architectural Coatings

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	5600 Beach Boulevard Residential Development Project, Townhomes and Duets Site
Construction Start Date	5/1/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	18.8000
Location	5600 Beach Blvd, Buena Park, CA 90621, USA
County	Orange
City	Buena Park
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5798
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.37

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse High Rise	114.000	Dwelling Unit	5.13000	317,721	86,131.0	—	340.000	—

Condo/Townhouse High Rise	117.000	Dwelling Unit	5.10000	349,216	65,704.0	—	349.000	—
Health Club	0.44000	1000sqft	0.01010	437.000	0.00000	—	—	—
Other Non-Asphalt Surfaces	9.53000	1000sqft	0.21878	0.00000	0.00000	—	—	—
Other Asphalt Surfaces	110.610	1000sqft	2.53926	0.00000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.77912	1.46751	10.0817	21.0679	0.02897	0.30581	2.38825	2.69406	0.28179	0.56868	0.85047	—	5,235.80	5,235.80	0.15695	0.13453	7.68080	5,287.49
2029	1.72932	1.42653	9.70253	20.5586	0.02896	0.28121	2.38825	2.66946	0.25916	0.56868	0.82784	—	5,180.09	5,180.09	0.15692	0.13452	6.83553	5,230.94
2030	22.4411	21.9706	17.4089	34.7810	0.04736	0.51462	3.06937	3.58399	0.47393	0.72905	1.20298	—	7,689.68	7,689.68	0.23251	0.15559	7.57918	7,749.44
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.77436	1.46384	10.1891	19.9803	0.02897	0.30581	2.38825	2.69406	0.28179	0.56868	0.85047	—	5,135.25	5,135.25	0.16117	0.20244	0.19895	5,199.80
2029	1.72456	1.41865	9.74307	19.5274	0.02896	0.28121	2.38825	2.66946	0.25916	0.56868	0.82784	—	5,081.37	5,081.37	0.15692	0.20243	0.17685	5,145.79
2030	22.4411	21.9652	17.5364	33.5071	0.04736	0.51462	3.06937	3.58399	0.47393	0.72905	1.20298	—	7,562.94	7,562.94	0.23730	0.15559	0.19728	7,615.44

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.85274	0.70386	4.88522	9.72272	0.01389	0.14662	1.13142	1.27804	0.13510	0.26925	0.40435	—	2,475.05	2,475.05	0.07727	0.09706	1.59228	2,507.50
2029	1.22960	1.01109	6.95902	14.1643	0.02069	0.20087	1.68559	1.88645	0.18511	0.40112	0.58624	—	3,648.49	3,648.49	0.11209	0.14459	2.10947	3,696.49
2030	3.44041	3.24601	6.61013	13.2817	0.01940	0.18739	1.48316	1.67055	0.17266	0.35274	0.52540	—	3,306.60	3,306.60	0.10017	0.07985	1.63055	3,334.53
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.15563	0.12846	0.89155	1.77440	0.00253	0.02676	0.20648	0.23324	0.02466	0.04914	0.07379	—	409.773	409.773	0.01279	0.01607	0.26362	415.145
2029	0.22440	0.18452	1.27002	2.58499	0.00378	0.03666	0.30762	0.34428	0.03378	0.07320	0.10699	—	604.049	604.049	0.01856	0.02394	0.34925	611.996
2030	0.62788	0.59240	1.20635	2.42391	0.00354	0.03420	0.27068	0.30488	0.03151	0.06437	0.09589	—	547.445	547.445	0.01658	0.01322	0.26996	552.070

3. Construction Emissions Details

3.2. P4.2 Building Construction (Townhomes and Duet Homes) (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	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56806	0.47534	4.27909	6.20183	0.01122	0.14395	—	0.14395	0.13243	—	0.13243	—	1,149.47	1,149.47	0.04663	0.00933	—	1,153.41
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10367	0.08675	0.78093	1.13183	0.00205	0.02627	—	0.02627	0.02417	—	0.02417	—	190.307	190.307	0.00772	0.00154	—	190.960
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53960	0.46068	0.42765	7.76736	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	2,093.62	2,093.62	0.02202	0.01101	6.04026	2,103.49
Vendor	0.05471	0.01540	0.72911	0.36526	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	744.724	744.724	0.03767	0.10406	1.64053	778.317
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53593	0.45701	0.50290	6.67163	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	1,992.65	1,992.65	0.02570	0.07892	0.15635	2,016.97
Vendor	0.05362	0.01540	0.76121	0.37345	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	745.140	745.140	0.03822	0.10406	0.04261	777.149
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25871	0.22088	0.24111	3.34392	0.00000	0.00000	1.03086	1.03086	0.00000	0.24144	0.24144	—	968.439	968.439	0.01232	0.03784	1.25246	981.276
Vendor	0.02597	0.00764	0.36502	0.17696	0.00267	0.00267	0.10056	0.10323	0.00267	0.02781	0.03048	—	357.144	357.144	0.01832	0.04989	0.33982	372.810

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04722	0.04031	0.04400	0.61027	0.00000	0.00000	0.18813	0.18813	0.00000	0.04406	0.04406	—	160.336	160.336	0.00204	0.00626	0.20736	162.461
Vendor	0.00474	0.00139	0.06662	0.03230	0.00049	0.00049	0.01835	0.01884	0.00049	0.00508	0.00556	—	59.1292	59.1292	0.00303	0.00826	0.05626	61.7229
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. P4.2 Building Construction (Townhomes and Duet Homes) (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	1.15336	0.96514	8.58166	12.9012	0.02340	0.27564	—	0.27564	0.25359	—	0.25359	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15336	0.96514	8.58166	12.9012	0.02340	0.27564	—	0.27564	0.25359	—	0.25359	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82383	0.68938	6.12975	9.21517	0.01671	0.19689	—	0.19689	0.18114	—	0.18114	—	1,712.02	1,712.02	0.06945	0.01389	—	1,717.90

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15035	0.12581	1.11868	1.68177	0.00305	0.03593	—	0.03593	0.03306	—	0.03306	—	283.445	283.445	0.01150	0.00230	—	284.418
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52125	0.44600	0.42397	7.30484	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	2,058.27	2,058.27	0.02202	0.01101	5.37020	2,067.48
Vendor	0.05471	0.01540	0.69690	0.35249	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	724.987	724.987	0.03767	0.10406	1.46533	758.405
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51758	0.43866	0.43132	6.26601	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	1,959.12	1,959.12	0.02202	0.07892	0.13887	1,983.33
Vendor	0.05362	0.01485	0.73009	0.36013	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	725.415	725.415	0.03767	0.10406	0.03799	757.407
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36708	0.31070	0.30808	4.69466	0.00000	0.00000	1.53577	1.53577	0.00000	0.35969	0.35969	—	1,418.49	1,418.49	0.01573	0.05637	1.65781	1,437.34
Vendor	0.03869	0.01100	0.52118	0.25451	0.00398	0.00398	0.14981	0.15379	0.00398	0.04143	0.04541	—	517.977	517.977	0.02691	0.07433	0.45166	541.253
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06699	0.05670	0.05623	0.85678	0.00000	0.00000	0.28028	0.28028	0.00000	0.06564	0.06564	—	234.847	234.847	0.00260	0.00933	0.27447	237.968
Vendor	0.00706	0.00201	0.09512	0.04645	0.00073	0.00073	0.02734	0.02807	0.00073	0.00756	0.00829	—	85.7570	85.7570	0.00446	0.01231	0.07478	89.6105
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. P4.2 Building Construction (Townhomes and Duet Homes) (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	1.12372	0.94034	8.39196	12.8848	0.02340	0.26012	—	0.26012	0.23931	—	0.23931	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12372	0.94034	8.39196	12.8848	0.02340	0.26012	—	0.26012	0.23931	—	0.23931	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66852	0.55942	4.99248	7.66530	0.01392	0.15475	—	0.15475	0.14237	—	0.14237	—	1,425.90	1,425.90	0.05784	0.01157	—	1,430.80
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12200	0.10209	0.91113	1.39892	0.00254	0.02824	—	0.02824	0.02598	—	0.02598	—	236.075	236.075	0.00958	0.00192	—	236.885

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50290	0.42765	0.35239	6.91390	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	2,025.33	2,025.33	0.01835	0.01101	4.73898	2,033.81
Vendor	0.04805	0.01540	0.67134	0.34026	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	703.525	703.525	0.03210	0.09850	1.29013	734.970
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50290	0.42397	0.42765	5.93197	0.00000	0.00000	2.17636	2.17636	0.00000	0.51013	0.51013	—	1,927.86	1,927.86	0.02202	0.01101	0.12333	1,931.81
Vendor	0.04805	0.01485	0.69843	0.34736	0.00557	0.00557	0.21189	0.21746	0.00557	0.05854	0.06411	—	703.965	703.965	0.03210	0.09850	0.03361	734.153
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29700	0.25223	0.25441	3.71135	0.00000	0.00000	1.27911	1.27911	0.00000	0.29958	0.29958	—	1,162.55	1,162.55	0.01310	0.00655	1.21899	1,166.05
Vendor	0.02858	0.00916	0.41856	0.20437	0.00331	0.00331	0.12477	0.12809	0.00331	0.03451	0.03782	—	418.646	418.646	0.01910	0.05860	0.33259	436.918
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05420	0.04603	0.04643	0.67732	0.00000	0.00000	0.23344	0.23344	0.00000	0.05467	0.05467	—	192.473	192.473	0.00217	0.00108	0.20182	193.052
Vendor	0.00522	0.00167	0.07639	0.03730	0.00060	0.00060	0.02277	0.02338	0.00060	0.00630	0.00690	—	69.3116	69.3116	0.00316	0.00970	0.05506	72.3367
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8. P4.2 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76655	0.64411	6.28020	9.89564	0.01395	0.22035	—	0.22035	0.20272	—	0.20272	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.15472	0.15472	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76655	0.64411	6.28020	9.89564	0.01395	0.22035	—	0.22035	0.20272	—	0.20272	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.15472	0.15472	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09031	0.07588	0.73986	1.16579	0.00164	0.02596	—	0.02596	0.02388	—	0.02388	—	177.964	177.964	0.00722	0.00144	—	178.575
Paving	0.01823	0.01823	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01648	0.01385	0.13502	0.21276	0.00030	0.00474	—	0.00474	0.00436	—	0.00436	—	29.4640	29.4640	0.00120	0.00024	—	29.5651
Paving	0.00333	0.00333	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04530	0.03853	0.03175	0.62286	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	182.459	182.459	0.00165	0.00099	0.42693	183.222
Vendor	0.00388	0.00124	0.05422	0.02748	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	56.8149	56.8149	0.00259	0.00795	0.10419	59.3543
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04530	0.03820	0.03853	0.53440	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	173.677	173.677	0.00198	0.00099	0.01111	174.033
Vendor	0.00388	0.00120	0.05640	0.02805	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	56.8504	56.8504	0.00259	0.00795	0.00271	59.2883
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00530	0.00450	0.00454	0.06621	0.00000	0.00000	0.02282	0.02282	0.00000	0.00534	0.00534	—	20.7396	20.7396	0.00023	0.00012	0.02175	20.8021
Vendor	0.00046	0.00015	0.00669	0.00327	0.00005	0.00005	0.00200	0.00205	0.00005	0.00055	0.00060	—	6.69503	6.69503	0.00031	0.00094	0.00532	6.98723
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00097	0.00082	0.00083	0.01208	0.00000	0.00000	0.00416	0.00416	0.00000	0.00098	0.00098	—	3.43368	3.43368	0.00004	0.00002	0.00360	3.44402
Vendor	0.00008	0.00003	0.00122	0.00060	0.00001	0.00001	0.00036	0.00037	0.00001	0.00010	0.00011	—	1.10844	1.10844	0.00005	0.00016	0.00088	1.15682
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10. P4.2 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11905	0.09839	0.78473	1.10719	0.00173	0.01097	—	0.01097	0.01009	—	0.01009	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	19.5029	19.5029	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11905	0.09839	0.78473	1.10719	0.00173	0.01097	—	0.01097	0.01009	—	0.01009	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	19.5029	19.5029	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01403	0.01159	0.09245	0.13044	0.00020	0.00129	—	0.00129	0.00119	—	0.00119	—	15.7289	15.7289	0.00064	0.00013	—	15.7829
Architectural Coatings	2.29760	2.29760	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00256	0.00212	0.01687	0.02380	0.00004	0.00024	—	0.00024	0.00022	—	0.00022	—	2.60410	2.60410	0.00011	0.00002	—	2.61304
Architectural Coatings	0.41931	0.41931	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10058	0.08553	0.07048	1.38278	0.00000	0.00000	0.43527	0.43527	0.00000	0.10203	0.10203	—	405.067	405.067	0.00367	0.00220	0.94780	406.763
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10058	0.08479	0.08553	1.18639	0.00000	0.00000	0.43527	0.43527	0.00000	0.10203	0.10203	—	385.571	385.571	0.00440	0.00220	0.02467	386.362
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01176	0.00999	0.01008	0.14699	0.00000	0.00000	0.05066	0.05066	0.00000	0.01186	0.01186	—	46.0430	46.0430	0.00052	0.00026	0.04828	46.1816
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00215	0.00182	0.00184	0.02683	0.00000	0.00000	0.00925	0.00925	0.00000	0.00217	0.00217	—	7.62294	7.62294	0.00009	0.00004	0.00799	7.64588
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.12. P4.2 Finishing and Landscaping (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	0.06584	0.05532	0.76659	1.50227	0.00226	0.01716	—	0.01716	0.01579	—	0.01579	—	245.104	245.104	0.00994	0.00199	—	245.945
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06584	0.05532	0.76659	1.50227	0.00226	0.01716	—	0.01716	0.01579	—	0.01579	—	245.104	245.104	0.00994	0.00199	—	245.945
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00776	0.00652	0.09031	0.17698	0.00027	0.00202	—	0.00202	0.00186	—	0.00186	—	28.8753	28.8753	0.00117	0.00023	—	28.9744
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00142	0.00119	0.01648	0.03230	0.00005	0.00037	—	0.00037	0.00034	—	0.00034	—	4.78064	4.78064	0.00019	0.00004	—	4.79704

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00755	0.00642	0.00529	0.10381	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	30.4098	30.4098	0.00028	0.00017	0.07115	30.5371
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00755	0.00637	0.00642	0.08907	0.00000	0.00000	0.03268	0.03268	0.00000	0.00766	0.00766	—	28.9462	28.9462	0.00033	0.00017	0.00185	29.0056
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00088	0.00075	0.00076	0.01103	0.00000	0.00000	0.00380	0.00380	0.00000	0.00089	0.00089	—	3.45661	3.45661	0.00004	0.00002	0.00362	3.46701
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00016	0.00014	0.00014	0.00201	0.00000	0.00000	0.00069	0.00069	0.00000	0.00016	0.00016	—	0.57228	0.57228	0.00001	< 0.000005	0.00060	0.57400
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description

P4.2 Building Construction (Townhomes and Duet Homes)	Building Construction	5/1/2028	10/31/2030	5.00000	654.000	—
P4.2 Paving	Paving	9/3/2030	10/31/2030	5.00000	43.0000	—
P4.2 Architectural Coating	Architectural Coating	9/3/2030	10/31/2030	5.00000	43.0000	—
P4.2 Finishing and Landscaping	Trenching	9/3/2030	10/31/2030	5.00000	43.0000	—

5.2. Off-Road Equipment

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
P4.2 Building Construction (Townhomes and Duet Homes)	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
P4.2 Building Construction (Townhomes and Duet Homes)	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
P4.2 Building Construction (Townhomes and Duet Homes)	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
P4.2 Building Construction (Townhomes and Duet Homes)	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
P4.2 Building Construction (Townhomes and Duet Homes)	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
P4.2 Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
P4.2 Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
P4.2 Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000

P4.2 Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000
P4.2 Finishing and Landscaping	Skid Steer Loaders	Diesel	Average	1.000000	8.00000	71.0000	0.37000

5.3. Construction Vehicles

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
P4.2 Building Construction (Townhomes and Duet Homes)	Worker	166.504	18.5000	LDA,LDT1,LDT2
P4.2 Building Construction (Townhomes and Duet Homes)	Vendor	24.7655	10.2000	HHDT,MHDT
P4.2 Building Construction (Townhomes and Duet Homes)	Hauling	0.00000	20.0000	HHDT
P4.2 Building Construction (Townhomes and Duet Homes)	Onsite truck	0.00000	0.00000	HHDT
P4.2 Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
P4.2 Paving	Vendor	2.00000	10.2000	HHDT,MHDT
P4.2 Paving	Hauling	0.00000	20.0000	HHDT
P4.2 Paving	Onsite truck	0.00000	0.00000	HHDT
P4.2 Architectural Coating	Worker	33.3007	18.5000	LDA,LDT1,LDT2
P4.2 Architectural Coating	Vendor	0.00000	10.2000	HHDT,MHDT
P4.2 Architectural Coating	Hauling	0.00000	20.0000	HHDT
P4.2 Architectural Coating	Onsite truck	0.00000	0.00000	HHDT
P4.2 Finishing and Landscaping	Worker	2.50000	18.5000	LDA,LDT1,LDT2
P4.2 Finishing and Landscaping	Vendor	0.00000	10.2000	HHDT,MHDT
P4.2 Finishing and Landscaping	Hauling	0.00000	20.0000	HHDT
P4.2 Finishing and Landscaping	Onsite truck	0.00000	0.00000	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)
P4.2 Architectural Coating	1,350,547	450,182	655.500	218.500	7,208.40

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
P4.2 Paving	0.00000	0.00000	0.00000	0.00000	2.75803

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
P4.2 Paving	Condo/Townhouse High Rise	—	0%
P4.2 Paving	Condo/Townhouse High Rise	—	0%
P4.2 Paving	Health Club	0.00000	0%
P4.2 Paving	Other Non-Asphalt Surfaces	0.21878	0%

P4.2 Paving	Other Asphalt Surfaces	2.53926	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00000	531.983	0.03300	0.00400
2029	0.00000	531.983	0.03300	0.00400
2030	0.00000	531.983	0.03300	0.00400

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Based on applicant information, see assumptions file
Construction: Construction Phases	Based on applicant information, see assumptions file
Construction: Off-Road Equipment	Phase 4.2 equipment mix based on acreage of 13.0 acres, does not assume shared equipment with other development phases, finishing and landscaping based on previous residential development projects.
Construction: Architectural Coatings	South Coast AQMD Rule 1113

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	1.78125	5.13000
Building Area	sq. ft	109,440	317,721
Landscape Area	sq. ft	—	86,131.0
Lot Area	acre	1.82813	5.10000
Building Area	sq. ft	112,320	349,216
Landscape Area	sq. ft		65,704.0

Building Area	sq. ft	440.000	437.000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.8. Architectural Coatings

Phase Name	Model Parameter	Units	Default Value	New Value
P4.2 Architectural Coating	Non-Residential Interior VOC	g/L	100.0000	50.0000
P4.2 Architectural Coating	Non-Residential Exterior VOC	g/L	100.0000	50.0000

CalEEMod Operation Model

Existing Amway Nutrilite Center Campus

Year 2026

5600 Beach Boulevard Residential Development Project, Existing Amway Nutrilite Center Campus, Operation, Year 2026 Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

8.1. Justifications

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	5600 Beach Boulevard Residential Development Project, Existing Amway Nutrilite Center Campus, Operation, Year 2026
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.8
Precipitation (days)	19
Location	5600 Beach Blvd, Buena Park, CA 90621, USA
County	Orange
City	Buena Park
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5798
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.35

1.2. Land Use Types

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

General Heavy Industry	370	1000sqft	8.5	370,031	0.00	—	—	—
Parking Lot	196	1000sqft	4.5	0.00	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.	16	16	6.6	59	0.11	0.40	9.4	9.8	0.39	2.4	2.8	430	17,983	18,413	27	0.70	127	19,414
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14	13	6.7	40	0.11	0.37	9.4	9.8	0.37	2.4	2.7	430	17,509	17,939	27	0.72	97	18,915
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15	15	6.8	52	0.11	0.39	9.3	9.7	0.38	2.3	2.7	430	17,664	18,094	27	0.72	110	19,084
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.8	2.7	1.2	9.5	0.02	0.07	1.7	1.8	0.07	0.43	0.50	71	2,925	2,996	4.4	0.12	18	3,160

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	4.7	4.3	2.2	40	0.09	0.05	9.4	9.4	0.04	2.4	2.4	—	8,759	8,759	0.38	0.25	31	8,873
Area	11	11	0.14	16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	66	66	< 0.005	< 0.005	—	66
Energy	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	8,606	8,606	0.79	0.05	—	8,640
Water	—	—	—	—	—	—	—	—	—	—	—	183	552	735	0.68	0.41	—	873
Waste	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Total	16	16	6.6	59	0.11	0.40	9.4	9.8	0.39	2.4	2.8	430	17,983	18,413	27	0.70	127	19,414
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.7	4.3	2.4	37	0.08	0.05	9.4	9.4	0.04	2.4	2.4	—	8,351	8,351	0.39	0.26	0.79	8,440
Area	8.4	8.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	8,606	8,606	0.79	0.05	—	8,640
Water	—	—	—	—	—	—	—	—	—	—	—	183	552	735	0.68	0.41	—	873
Waste	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Total	14	13	6.7	40	0.11	0.37	9.4	9.8	0.37	2.4	2.7	430	17,509	17,939	27	0.72	97	18,915
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.6	4.2	2.4	38	0.08	0.05	9.3	9.3	0.04	2.3	2.4	—	8,461	8,461	0.39	0.27	13	8,563
Area	10	10	0.09	11	< 0.005	0.02	—	0.02	0.01	—	0.01	—	45	45	< 0.005	< 0.005	—	45
Energy	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	8,606	8,606	0.79	0.05	—	8,640
Water	—	—	—	—	—	—	—	—	—	—	—	183	552	735	0.68	0.41	—	873
Waste	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96

Total	15	15	6.8	52	0.11	0.39	9.3	9.7	0.38	2.3	2.7	430	17,664	18,094	27	0.72	110	19,084
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.84	0.77	0.44	6.9	0.02	0.01	1.7	1.7	0.01	0.43	0.44	—	1,401	1,401	0.06	0.04	2.2	1,418
Area	1.9	1.9	0.02	2.0	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.5	7.5	< 0.005	< 0.005	—	7.5
Energy	0.09	0.04	0.78	0.65	< 0.005	0.06	—	0.06	0.06	—	0.06	—	1,425	1,425	0.13	0.01	—	1,430
Water	—	—	—	—	—	—	—	—	—	—	—	30	91	122	0.11	0.07	—	145
Waste	—	—	—	—	—	—	—	—	—	—	—	41	0.00	41	4.1	0.00	—	143
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	16
Total	2.8	2.7	1.2	9.5	0.02	0.07	1.7	1.8	0.07	0.43	0.50	71	2,925	2,996	4.4	0.12	18	3,160

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	4.7	4.3	2.2	40	0.09	0.05	9.4	9.4	0.04	2.4	2.4	—	8,759	8,759	0.38	0.25	31	8,873
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.7	4.3	2.2	40	0.09	0.05	9.4	9.4	0.04	2.4	2.4	—	8,759	8,759	0.38	0.25	31	8,873
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	4.7	4.3	2.4	37	0.08	0.05	9.4	9.4	0.04	2.4	2.4	—	8,351	8,351	0.39	0.26	0.79	8,440
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.7	4.3	2.4	37	0.08	0.05	9.4	9.4	0.04	2.4	2.4	—	8,351	8,351	0.39	0.26	0.79	8,440
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.84	0.77	0.44	6.9	0.02	0.01	1.7	1.7	0.01	0.43	0.44	—	1,401	1,401	0.06	0.04	2.2	1,418
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.84	0.77	0.44	6.9	0.02	0.01	1.7	1.7	0.01	0.43	0.44	—	1,401	1,401	0.06	0.04	2.2	1,418

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	3,367	3,367	0.32	0.04	—	3,386
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	163	163	0.02	< 0.005	—	164
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,530	3,530	0.34	0.04	—	3,550
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	3,367	3,367	0.32	0.04	—	3,386
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	163	163	0.02	< 0.005	—	164
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,530	3,530	0.34	0.04	—	3,550
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	557	557	0.05	0.01	—	561
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27	27	< 0.005	< 0.005	—	27
Total	—	—	—	—	—	—	—	—	—	—	—	—	584	584	0.06	0.01	—	588

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	5,076	5,076	0.45	0.01	—	5,090
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	5,076	5,076	0.45	0.01	—	5,090
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	5,076	5,076	0.45	0.01	—	5,090

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	5,076	5,076	0.45	0.01	—	5,090
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.09	0.04	0.78	0.65	< 0.005	0.06	—	0.06	0.06	—	0.06	—	840	840	0.07	< 0.005	—	843
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.09	0.04	0.78	0.65	< 0.005	0.06	—	0.06	0.06	—	0.06	—	840	840	0.07	< 0.005	—	843

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	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	7.9	7.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.9	2.6	0.14	16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	66	66	< 0.005	< 0.005	—	66
Total	11	11	0.14	16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	66	66	< 0.005	< 0.005	—	66

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.9	7.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	8.4	8.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.4	1.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.36	0.33	0.02	2.0	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.5	7.5	< 0.005	< 0.005	—	7.5
Total	1.9	1.9	0.02	2.0	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.5	7.5	< 0.005	< 0.005	—	7.5

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	183	552	735	0.68	0.41	—	873
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	183	552	735	0.68	0.41	—	873
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	183	552	735	0.68	0.41	—	873
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	183	552	735	0.68	0.41	—	873
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	30	91	122	0.11	0.07	—	145
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30	91	122	0.11	0.07	—	145

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	41	0.00	41	4.1	0.00	—	143
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	41	0.00	41	4.1	0.00	—	143

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	16
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	16

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	1,332	1,332	1,332	486,219	13,405	13,405	13,405	4,892,741
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
General Heavy Industry	Wood Fireplaces	0	0
General Heavy Industry	Gas Fireplaces	0	0
General Heavy Industry	Propane Fireplaces	0	0
General Heavy Industry	Electric Fireplaces	0	0

General Heavy Industry	No Fireplaces	0	0
General Heavy Industry	Conventional Wood Stoves	0	0
General Heavy Industry	Catalytic Wood Stoves	0	0
General Heavy Industry	Non-Catalytic Wood Stoves	0	0
General Heavy Industry	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	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)
undefined	0.00	0.00	555,047	185,016	11,767

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)
General Heavy Industry	3,549,610	346	0.0330	0.0040	15,838,045
Parking Lot	171,801	346	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)
General Heavy Industry	85,569,438	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	459	0.00
Parking Lot	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.0	4.0	18

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Based on applicant information, see assumptions file
Operations: Vehicle Data	Trips calculated based on ITE Trip Gen 12th Edition daily trip rates for Light Industrial land use.
Operations: Fleet Mix	Fleet mix for the project is modified to reflect a higher proportion of passenger vehicles than the regional VMT. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.
Operations: Architectural Coatings	South Coast AQMD Rule 1113
Operations: Water and Waste Water	Assumes 100% aerobic treatment.

CalEEMod Operation Model

Existing Amway Nutrilite Center Campus

Year 2030

5600 Beach Boulevard Residential Development Project, Existing Amway Nutrilite Center Campus, Operation, Year 2030 Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

8.1. Justifications

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	5600 Beach Boulevard Residential Development Project, Existing Amway Nutrilite Center Campus, Operation, Year 2030
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.8
Precipitation (days)	19
Location	5600 Beach Blvd, Buena Park, CA 90621, USA
County	Orange
City	Buena Park
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5798
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.35

1.2. Land Use Types

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

General Heavy Industry	370	1000sqft	8.5	370,031	0.00	—	—	—
Parking Lot	196	1000sqft	4.5	0.00	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.	16	15	6.2	54	0.11	0.39	9.4	9.8	0.38	2.4	2.8	430	16,376	16,806	27	0.68	114	17,785
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13	12	6.2	36	0.10	0.36	9.4	9.7	0.36	2.4	2.7	430	15,931	16,361	27	0.69	97	17,327
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15	14	6.3	47	0.10	0.38	9.3	9.6	0.37	2.3	2.7	430	16,078	16,508	27	0.69	104	17,482
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.7	2.6	1.2	8.7	0.02	0.07	1.7	1.8	0.07	0.43	0.50	71	2,662	2,733	4.4	0.11	17	2,894

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	4.1	3.8	1.8	35	0.08	0.04	9.4	9.4	0.03	2.4	2.4	—	8,159	8,159	0.33	0.22	18	8,250
Area	11	11	0.14	16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	66	66	< 0.005	< 0.005	—	66
Energy	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	7,735	7,735	0.79	0.05	—	7,769
Water	—	—	—	—	—	—	—	—	—	—	—	183	416	599	0.68	0.41	—	737
Waste	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Total	16	15	6.2	54	0.11	0.39	9.4	9.8	0.38	2.4	2.8	430	16,376	16,806	27	0.68	114	17,785
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.1	3.8	2.0	32	0.08	0.04	9.4	9.4	0.03	2.4	2.4	—	7,780	7,780	0.34	0.24	0.46	7,859
Area	8.4	8.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	7,735	7,735	0.79	0.05	—	7,769
Water	—	—	—	—	—	—	—	—	—	—	—	183	416	599	0.68	0.41	—	737
Waste	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Total	13	12	6.2	36	0.10	0.36	9.4	9.7	0.36	2.4	2.7	430	15,931	16,361	27	0.69	97	17,327
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.1	3.8	2.0	33	0.08	0.04	9.3	9.3	0.03	2.3	2.4	—	7,882	7,882	0.34	0.24	7.6	7,969
Area	10	10	0.09	11	< 0.005	0.02	—	0.02	0.01	—	0.01	—	45	45	< 0.005	< 0.005	—	45
Energy	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	7,735	7,735	0.79	0.05	—	7,769
Water	—	—	—	—	—	—	—	—	—	—	—	183	416	599	0.68	0.41	—	737
Waste	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96

Total	15	14	6.3	47	0.10	0.38	9.3	9.6	0.37	2.3	2.7	430	16,078	16,508	27	0.69	104	17,482
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.75	0.69	0.36	6.0	0.01	0.01	1.7	1.7	0.01	0.43	0.43	—	1,305	1,305	0.06	0.04	1.3	1,319
Area	1.9	1.9	0.02	2.0	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.5	7.5	< 0.005	< 0.005	—	7.5
Energy	0.09	0.04	0.78	0.65	< 0.005	0.06	—	0.06	0.06	—	0.06	—	1,281	1,281	0.13	0.01	—	1,286
Water	—	—	—	—	—	—	—	—	—	—	—	30	69	99	0.11	0.07	—	122
Waste	—	—	—	—	—	—	—	—	—	—	—	41	0.00	41	4.1	0.00	—	143
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	16
Total	2.7	2.6	1.2	8.7	0.02	0.07	1.7	1.8	0.07	0.43	0.50	71	2,662	2,733	4.4	0.11	17	2,894

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	4.1	3.8	1.8	35	0.08	0.04	9.4	9.4	0.03	2.4	2.4	—	8,159	8,159	0.33	0.22	18	8,250
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.1	3.8	1.8	35	0.08	0.04	9.4	9.4	0.03	2.4	2.4	—	8,159	8,159	0.33	0.22	18	8,250
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	4.1	3.8	2.0	32	0.08	0.04	9.4	9.4	0.03	2.4	2.4	—	7,780	7,780	0.34	0.24	0.46	7,859
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.1	3.8	2.0	32	0.08	0.04	9.4	9.4	0.03	2.4	2.4	—	7,780	7,780	0.34	0.24	0.46	7,859
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.75	0.69	0.36	6.0	0.01	0.01	1.7	1.7	0.01	0.43	0.43	—	1,305	1,305	0.06	0.04	1.3	1,319
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.75	0.69	0.36	6.0	0.01	0.01	1.7	1.7	0.01	0.43	0.43	—	1,305	1,305	0.06	0.04	1.3	1,319

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	2,536	2,536	0.32	0.04	—	2,556
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	123	123	0.02	< 0.005	—	124
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,659	2,659	0.34	0.04	—	2,679
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	2,536	2,536	0.32	0.04	—	2,556
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	123	123	0.02	< 0.005	—	124
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,659	2,659	0.34	0.04	—	2,679
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	420	420	0.05	0.01	—	423
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	20	20	< 0.005	< 0.005	—	20
Total	—	—	—	—	—	—	—	—	—	—	—	—	440	440	0.06	0.01	—	444

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	5,076	5,076	0.45	0.01	—	5,090
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	5,076	5,076	0.45	0.01	—	5,090
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	5,076	5,076	0.45	0.01	—	5,090

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.47	0.23	4.3	3.6	0.03	0.32	—	0.32	0.32	—	0.32	—	5,076	5,076	0.45	0.01	—	5,090
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.09	0.04	0.78	0.65	< 0.005	0.06	—	0.06	0.06	—	0.06	—	840	840	0.07	< 0.005	—	843
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.09	0.04	0.78	0.65	< 0.005	0.06	—	0.06	0.06	—	0.06	—	840	840	0.07	< 0.005	—	843

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	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	7.9	7.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.9	2.6	0.14	16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	66	66	< 0.005	< 0.005	—	66
Total	11	11	0.14	16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	66	66	< 0.005	< 0.005	—	66

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.9	7.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	8.4	8.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.4	1.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.36	0.33	0.02	2.0	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.5	7.5	< 0.005	< 0.005	—	7.5
Total	1.9	1.9	0.02	2.0	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.5	7.5	< 0.005	< 0.005	—	7.5

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	183	416	599	0.68	0.41	—	737
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	183	416	599	0.68	0.41	—	737
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	183	416	599	0.68	0.41	—	737
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	183	416	599	0.68	0.41	—	737
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	30	69	99	0.11	0.07	—	122
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30	69	99	0.11	0.07	—	122

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	25	0.00	—	865
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	41	0.00	41	4.1	0.00	—	143
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	41	0.00	41	4.1	0.00	—	143

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96	96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	16
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	16

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	1,332	1,332	1,332	486,219	13,405	13,405	13,405	4,892,741
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
General Heavy Industry	Wood Fireplaces	0	0
General Heavy Industry	Gas Fireplaces	0	0
General Heavy Industry	Propane Fireplaces	0	0
General Heavy Industry	Electric Fireplaces	0	0

General Heavy Industry	No Fireplaces	0	0
General Heavy Industry	Conventional Wood Stoves	0	0
General Heavy Industry	Catalytic Wood Stoves	0	0
General Heavy Industry	Non-Catalytic Wood Stoves	0	0
General Heavy Industry	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	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)
undefined	0.00	0.00	555,047	185,016	11,767

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)
General Heavy Industry	3,549,610	261	0.0330	0.0040	15,838,045
Parking Lot	171,801	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)
General Heavy Industry	85,569,438	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	459	0.00
Parking Lot	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.0	4.0	18

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Based on applicant information, see assumptions file
Operations: Vehicle Data	Trips calculated based on ITE Trip Gen 12th Edition daily trip rates for Light Industrial land use.
Operations: Fleet Mix	Fleet mix for the project is modified to reflect a higher proportion of passenger vehicles than the regional VMT. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.
Operations: Architectural Coatings	South Coast AQMD Rule 1113
Operations: Water and Waste Water	Assumes 100% aerobic treatment.

CalEEMod Operation Model

Full Buildout

5600 Beach Boulevard Residential Development Project, Operation (2030) Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

8.1. Justifications

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	5600 Beach Boulevard Residential Development Project, Operation (2030)
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.8
Precipitation (days)	19
Location	5600 Beach Blvd, Buena Park, CA 90621, USA
County	Orange
City	Buena Park
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5798
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.35

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	50	Dwelling Unit	0.76	42,700	16,660	—	149	—

Condo/Townhouse High Rise	114	Dwelling Unit	5.1	317,721	86,131	—	340	—
Condo/Townhouse High Rise	117	Dwelling Unit	5.1	349,216	65,704	—	349	—
Health Club	0.44	1000sqft	0.01	437	0.00	—	—	—
Other Non-Asphalt Surfaces	9.5	1000sqft	0.22	0.00	0.00	—	—	—
Other Asphalt Surfaces	111	1000sqft	2.5	0.00	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.	23	23	2.2	55	0.09	0.05	10	10	0.04	2.6	2.6	136	9,821	9,957	12	0.32	24	10,374
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22	21	2.3	37	0.08	0.04	10	10	0.04	2.6	2.6	136	9,364	9,500	12	0.34	5.6	9,903
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22	22	2.4	48	0.09	0.05	10	10	0.04	2.6	2.6	136	9,505	9,641	12	0.34	13	10,053
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.1	4.0	0.44	8.8	0.02	0.01	1.9	1.9	0.01280	0.47	0.48	23	1,574	1,596	2.0	0.06	2.2	1,664

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	5.1	4.7	2.1	39	0.09	0.04	10	10	0.04	2.6	2.6	—	8,978	8,978	0.38	0.26	19	9,083
Area	18	18	0.15	16	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	43	43	< 0.005	< 0.005	—	43
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	740	740	0.09	0.01	—	745
Water	—	—	—	—	—	—	—	—	—	—	—	23	62	84	0.09	0.05	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11	0.00	—	397
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.1	5.1
Total	23	23	2.2	55	0.09	0.05	10	10	0.04	2.6	2.6	136	9,821	9,957	12	0.32	24	10,374
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.1	4.7	2.3	37	0.08	0.04	10	10	0.04	2.6	2.6	—	8,562	8,562	0.40	0.27	0.50	8,655
Area	16	16	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	740	740	0.09	0.01	—	745
Water	—	—	—	—	—	—	—	—	—	—	—	23	62	84	0.09	0.05	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11	0.00	—	397
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.1	5.1
Total	22	21	2.3	37	0.08	0.04	10	10	0.04	2.6	2.6	136	9,364	9,500	12	0.34	5.6	9,903
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.0	4.7	2.3	37	0.09	0.04	10	10	0.04	2.6	2.6	—	8,674	8,674	0.40	0.28	8.3	8,775
Area	17	17	0.10	11	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	29	29	< 0.005	< 0.005	—	29
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	740	740	0.09	0.01	—	745
Water	—	—	—	—	—	—	—	—	—	—	—	23	62	84	0.09	0.05	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11	0.00	—	397

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.1	5.1
Total	22	22	2.4	48	0.09	0.05	10	10	0.04	2.6	2.6	136	9,505	9,641	12	0.34	13	10,053
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.92	0.85	0.42	6.8	0.02	0.01	1.9	1.9	0.01	0.47	0.48	—	1,436	1,436	0.07	0.05	1.4	1,453
Area	3.2	3.2	0.02	2.0	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	4.8	4.8	< 0.005	< 0.005	—	4.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	122	122	0.02	< 0.005	—	123
Water	—	—	—	—	—	—	—	—	—	—	—	3.7	10	14	0.01	0.01	—	17
Waste	—	—	—	—	—	—	—	—	—	—	—	19	0.00	19	1.9	0.00	—	66
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84	0.84
Total	4.1	4.0	0.44	8.8	0.02	0.01	1.9	1.9	0.01	0.47	0.48	23	1,574	1,596	2.0	0.06	2.2	1,664

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	0.71	0.66	0.29	5.5	0.01	0.01	1.4	1.4	0.01	0.36	0.37	—	1,260	1,260	0.05	0.04	2.7	1,274
Condo/Townhouse High Rise	4.4	4.1	1.8	34	0.08	0.03	8.8	8.9	0.03	2.2	2.3	—	7,718	7,718	0.33	0.22	17	7,809
Health Club	0.00	0.00	0.00	0.00	0.00	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 Non-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
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	5.1	4.7	2.1	39	0.09	0.04	10	10	0.04	2.6	2.6	—	8,978	8,978	0.38	0.26	19	9,083
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.71	0.66	0.32	5.1	0.01	0.01	1.4	1.4	0.01	0.36	0.37	—	1,201	1,201	0.06	0.04	0.07	1,214
Condo/Townhouse High Rise	4.4	4.0	2.0	31	0.07	0.03	8.8	8.9	0.03	2.2	2.3	—	7,361	7,361	0.35	0.24	0.43	7,440
Health Club	0.00	0.00	0.00	0.00	0.00	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 Non-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
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	5.1	4.7	2.3	37	0.08	0.04	10	10	0.04	2.6	2.6	—	8,562	8,562	0.40	0.27	0.50	8,655
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.13	0.12	0.06	0.96	< 0.005	< 0.005	0.26	0.26	< 0.005	0.07	0.07	—	202	202	0.01	0.01	0.19	204
Condo/Townhouse High Rise	0.79	0.73	0.36	5.9	0.01	0.01	1.6	1.6	0.01	0.40	0.41	—	1,235	1,235	0.06	0.04	1.2	1,249

Health Club	0.00	0.00	0.00	0.00	0.00	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 Non-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
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	0.92	0.85	0.42	6.8	0.02	0.01	1.9	1.9	0.01	0.47	0.48	—	1,436	1,436	0.07	0.05	1.4	1,453

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	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.02	< 0.005	—	132
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	606	606	0.08	0.01	—	610
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	3.0	3.0	< 0.005	< 0.005	—	3.0
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	740	740	0.09	0.01	—	745
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.02	< 0.005	—	132
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	606	606	0.08	0.01	—	610
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	3.0	3.0	< 0.005	< 0.005	—	3.0
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	740	740	0.09	0.01	—	745
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	22	22	< 0.005	< 0.005	—	22
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	100	100	0.01	< 0.005	—	101
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.50	0.50	< 0.005	< 0.005	—	0.50
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	122	122	0.02	< 0.005	—	123

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	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse High Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	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 Non-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
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	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Condo/Townhou	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	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 Non-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
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	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse High Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	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 Non-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
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	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	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	15	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.2	1.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.5	1.4	0.15	16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43	43	< 0.005	< 0.005	—	43
Total	18	18	0.15	16	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	43	43	< 0.005	< 0.005	—	43
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	15	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.2	1.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	16	16	0.00	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	2.8	2.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.17	0.02	2.0	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.8	4.8	< 0.005	< 0.005	—	4.9
Total	3.2	3.2	0.02	2.0	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	4.8	4.8	< 0.005	< 0.005	—	4.9

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	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	—	—	—	—	—	—	—	—	—	—	—	4.0	10	14	0.02	0.01	—	17
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	19	51	70	0.07	0.04	—	84
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.06	0.13	0.18	< 0.005	< 0.005	—	0.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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	—	—	—	—	—	—	—	—	—	—	—	23	62	84	0.09	0.05	—	101

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	4.0	10	14	0.02	0.01	—	17
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	19	51	70	0.07	0.04	—	84
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.06	0.13	0.18	< 0.005	< 0.005	—	0.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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	—	—	—	—	—	—	—	—	—	—	—	23	62	84	0.09	0.05	—	101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.66	1.7	2.3	< 0.005	< 0.005	—	2.8
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	3.1	8.5	12	0.01	0.01	—	14
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.01	0.02	0.03	< 0.005	< 0.005	—	0.04
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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	—	—	—	—	—	—	—	—	—	—	—	3.7	10	14	0.01	0.01	—	17

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	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	—	—	—	—	—	—	—	—	—	—	—	20	0.00	20	2.0	0.00	—	70
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	92	0.00	92	9.2	0.00	—	322
Health Club	—	—	—	—	—	—	—	—	—	—	—	1.4	0.00	1.4	0.14	0.00	—	4.7
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11	0.00	—	397
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20	0.00	20	2.0	0.00	—	70

Condo/Townhou	—	—	—	—	—	—	—	—	—	—	—	92	0.00	92	9.2	0.00	—	322
Health Club	—	—	—	—	—	—	—	—	—	—	—	1.4	0.00	1.4	0.14	0.00	—	4.7
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11	0.00	—	397
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.3	0.00	3.3	0.33	0.00	—	12
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	15	0.00	15	1.5	0.00	—	53
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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	—	—	—	—	—	—	—	—	—	—	—	19	0.00	19	1.9	0.00	—	66

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.8	4.8
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.1	5.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.8	4.8
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.1	5.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05

Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.79	0.79
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84	0.84

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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
Apartments Mid Rise	241	241	241	87,965	2,061	2,061	2,061	752,346
Condo/Townhouse High Rise	708	708	708	258,398	6,055	6,055	6,055	2,210,024
Condo/Townhouse High Rise	769	769	769	280,572	6,574	6,574	6,574	2,399,671
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	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

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Apartments Mid Rise	Wood Fireplaces	0	0
Apartments Mid Rise	Gas Fireplaces	0	0
Apartments Mid Rise	Propane Fireplaces	0	0
Apartments Mid Rise	Electric Fireplaces	0	0
Apartments Mid Rise	No Fireplaces	5	5
Apartments Mid Rise	Conventional Wood Stoves	0	0
Apartments Mid Rise	Catalytic Wood Stoves	0	0
Apartments Mid Rise	Non-Catalytic Wood Stoves	0	0

Apartments Mid Rise	Pellet Wood Stoves	0	0
Condo/Townhouse High Rise	Wood Fireplaces	0	0
Condo/Townhouse High Rise	Gas Fireplaces	0	0
Condo/Townhouse High Rise	Propane Fireplaces	0	0
Condo/Townhouse High Rise	Electric Fireplaces	0	0
Condo/Townhouse High Rise	No Fireplaces	11	11
Condo/Townhouse High Rise	Conventional Wood Stoves	0	0
Condo/Townhouse High Rise	Catalytic Wood Stoves	0	0
Condo/Townhouse High Rise	Non-Catalytic Wood Stoves	0	0
Condo/Townhouse High Rise	Pellet Wood Stoves	0	0
Condo/Townhouse High Rise	Wood Fireplaces	0	0
Condo/Townhouse High Rise	Gas Fireplaces	0	0
Condo/Townhouse High Rise	Propane Fireplaces	0	0
Condo/Townhouse High Rise	Electric Fireplaces	0	0
Condo/Townhouse High Rise	No Fireplaces	12	12
Condo/Townhouse High Rise	Conventional Wood Stoves	0	0
Condo/Townhouse High Rise	Catalytic Wood Stoves	0	0
Condo/Townhouse High Rise	Non-Catalytic Wood Stoves	0	0
Condo/Townhouse High Rise	Pellet Wood Stoves	0	0
Health Club	Wood Fireplaces	0	0
Health Club	Gas Fireplaces	0	0
Health Club	Propane Fireplaces	0	0
Health Club	Electric Fireplaces	0	0
Health Club	No Fireplaces	0	0
Health Club	Conventional Wood Stoves	0	0
Health Club	Catalytic Wood Stoves	0	0
Health Club	Non-Catalytic Wood Stoves	0	0
Health Club	Pellet Wood Stoves	0	0

Other Non-Asphalt Surfaces	Wood Fireplaces	0	0
Other Non-Asphalt Surfaces	Gas Fireplaces	0	0
Other Non-Asphalt Surfaces	Propane Fireplaces	0	0
Other Non-Asphalt Surfaces	Electric Fireplaces	0	0
Other Non-Asphalt Surfaces	No Fireplaces	0	0
Other Non-Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Non-Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Pellet Wood Stoves	0	0
Other Asphalt Surfaces	Wood Fireplaces	0	0
Other Asphalt Surfaces	Gas Fireplaces	0	0
Other Asphalt Surfaces	Propane Fireplaces	0	0
Other Asphalt Surfaces	Electric Fireplaces	0	0
Other Asphalt Surfaces	No Fireplaces	0	0
Other Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Pellet Wood Stoves	0	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)
undefined	1,437,015	479,005	656	219	7,548

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)
Apartments Mid Rise	183,454	261	0.0330	0.0040	0.00
Condo/Townhouse High Rise	418,276	261	0.0330	0.0040	0.00
Condo/Townhouse High Rise	429,283	261	0.0330	0.0040	0.00
Health Club	4,198	261	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	261	0.0330	0.0040	0.00
Other Asphalt Surfaces	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	1,876,283	263,902
Condo/Townhouse High Rise	4,277,924	1,364,354
Condo/Townhouse High Rise	4,390,501	1,040,781
Health Club	26,023	0.00
Other Non-Asphalt Surfaces	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	37	0.00

Condo/Townhouse High Rise	84	0.00
Condo/Townhouse High Rise	87	0.00
Health Club	2.5	0.00
Other Non-Asphalt Surfaces	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	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	2.5	2.5	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.0	4.0	18
Health Club	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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Based on applicant information, see assumptions file
Construction: Construction Phases	Based on applicant information, see assumptions file
Operations: Vehicle Data	Trips calculated based on ITE Trip Gen 12th Edition daily trip rates for Single-Family Attached Housing, Multifamily Housing Low Rise, and Affordable Housing Income Limits.
Operations: Fleet Mix	Fleet mix for the project is modified to reflect a higher proportion of passenger vehicles than the regional VMT. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.
Operations: Hearths	No fireplaces
Operations: Architectural Coatings	South Coast AQMD Rule 1113
Operations: Energy Use	Converted natural gas consumption to electricity consumption for all-electric buildings, see assumptions file
Operations: Water and Waste Water	Assumes 100% aerobic treatment.