AIR QUALITY TECHNICAL REPORT

Introduction

This technical report addresses the air quality impacts generated by construction and operation of the Proposed Sunset & Everett Project on the east side of Sunset Boulevard north of Everett Street in the City of Los Angeles. The analysis evaluates the consistency of the Project with the air quality policies set forth within the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP) and the City's General Plan. The analysis of Project-generated air emissions focuses on whether the Project would cause an exceedance of an ambient air quality standard or SCAQMD significance threshold. Calculation worksheets, assumptions, and model outputs used in the analysis are included in the Technical Appendix to this analysis.

Regulatory Framework

Federal

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years, with the most recent amendments in 1990. At the federal level, the United States Environmental Protection Agency (USEPA) is responsible for implementation of some portions of the CAA (e.g., certain mobile source and other requirements). Other portions of the CAA (e.g., stationary source requirements) are implemented by state and local agencies. In California, the CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts and air pollution control districts at the regional and local levels.

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the National Ambient Air Quality Standard (NAAQS). These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA which are most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

NAAQS have been established for seven major air pollutants: CO (carbon monoxide), NO_2 (nitrogen dioxide), O_3 (ozone), $PM_{2.5}$ (particulate matter, 2.5 microns), PM_{10} (particulate matter, 10 microns), SO_2 (sulfur dioxide), and Pb (lead).

The Clean Air Act (CAA) requires the USEPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Title I provisions are implemented for the purpose of attaining NAAQS. The federal standards are summarized in Table 1. The USEPA has classified the Los Angeles County portion of the South Coast Air Basin (Basin) as a nonattainment area for O_3, $PM_{2.5}$, and Pb.

Table 1
State and National Ambient Air Quality Standards and Attainment Status for LA County

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m^3)	Non-attainment	--	--
	8-hour	0.070 ppm (137 µg/m^3)	N/A[1]	0.070 ppm (137 µg/m^3)	Non-attainment
Respirable Particulate Matter (PM_{10})	24-hour	50 µg/m^3	Non-attainment	150 µg/m^3	Maintenance
	Annual Arithmetic Mean	20 µg/m^3	Non-attainment	--	--
Fine Particulate Matter ($PM_{2.5}$)	24-hour	--	--	35 µg/m^3	Non-attainment
	Annual Arithmetic Mean	12 µg/m^3	Non-attainment	12 µg/m^3	Non-attainment
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Maintenance
	8-hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Maintenance
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm (338 µg/m^3)	Attainment	100 ppb (188 µg/m^3)	Maintenance
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Attainment	53 ppb (100 µg/m^3)	Maintenance
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm (655 µg/m^3)	Attainment	75 ppb (196 µg/m^3)	Attainment
	24-hour	0.04 ppm (105 µg/m^3)	Attainment	--	--
Lead (Pb)	30-day average	1.5 µg/m^3	Attainment	--	--
	Calendar Quarter	--	--	0.15 µg/m^3	Non-attainment
Visibility Reducing Particles	8-hour	Extinction of 0.07 per kilometer	N/A	No Federal Standards	
Sulfates	24-hour	25 µg/m^3	Attainment	No Federal Standards	
Hydrogen Sulfide (H_2S)	1-hour	0.03 ppm (42 µg/m^3)	Unclassified	No Federal Standards	
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m^3)	N/A	No Federal Standards	

[1]N/A = not available
Source: CARB, Ambient Air Quality Standards, and attainment status, 2020 (www.arb.ca.gov/desig/adm/adm.htm).

CAA Title II pertains to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline and automobile pollution control devices are examples of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO_X emissions have been lowered substantially and the specification requirements for cleaner burning gasoline are more stringent.

The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. USEPA has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet stricter emission standards established by CARB. USEPA adopted multiple tiers of emission standards to reduce emissions from non-road diesel engines (e.g., diesel-powered construction equipment) by integrating engine and fuel controls as a system to gain the greatest emission reductions. The first federal standards (Tier 1) for new non-road (or off-road) diesel engines were adopted in 1994 for engines over 50 horsepower, to be phased-in from 1996 to 2000. On August 27, 1998, USEPA introduced Tier 1 standards for equipment under 37 kW (50 horsepower) and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. The Tier 1 through 3 standards were met through advanced engine design, with no or only limited use of exhaust gas after-treatment (oxidation catalysts). Tier 3 standards for NO_X and hydrocarbon are similar in stringency to the 2004 standards for highway engines. However, Tier 3 standards for particulate matter were never adopted. On May 11, 2004, USEPA signed the final rule introducing Tier 4 emission standards, which were phased-in between 2008 and 2015. The Tier 4 standards require that emissions of particulate matter and NO_X be further reduced by about 90 percent. Such emission reductions are achieved through the use of control technologies—including advanced exhaust gas after-treatment.

State

California Clean Air Act. In addition to being subject to the requirements of CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). In California, CCAA is administered by CARB at the state level and by the air quality management districts and air pollution control districts at the regional and local levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for meeting the state requirements of the CAA, administering the CCAA, and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB regulates mobile air pollution sources, such as motor vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications in March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The State standards are summarized in Table 1.

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS thresholds have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment. Under the CCAA, the non-desert Los Angeles County portion of the Basin is designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$.

In August 2022, CARB approved regulations to ban new gasoline-powered cars beginning with 2035 models. Automakers will gradually electrify their fleet of new vehicles, beginning with 35 percent of 2026 models sold. In March 2023, USEPA approved CARB's regulations that mandate that all new medium- and heavy-duty trucks would be zero emissions by 2045 where feasible. Trucking companies would also have to gradually convert their existing fleets to zero emission vehicles.

Toxic Air Contaminant Identification and Control Act. The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. CARB's statewide comprehensive air toxics program was established in the early 1980s. The Toxic Air Contaminant Identification and Control Act created California's program to reduce exposure to air toxics. Under the Toxic Air Contaminant Identification and Control Act, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, CARB must consider criteria relating to "the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community" [Health and Safety Code Section 39666(f)].

The Toxic Air Contaminant Identification and Control Act also requires CARB to use available information gathered from the Air Toxics "Hot Spots" Information and Assessment Act program to include in the prioritization of compounds. CARB identified particulate emissions from diesel-fueled engines (diesel PM) TACs in August 1998. Following the identification process, CARB was required by law to determine if there is a need for further control, which led to the risk management phase of the program. For the risk management phase, CARB formed the Diesel Advisory Committee to assist in the development of a risk management guidance document and a risk reduction plan. With the assistance of the Diesel Advisory Committee and its subcommittees, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. The Board approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase. During the control measure phase, specific Statewide regulations designed to further reduce diesel PM emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce diesel PM emissions. Breathing H_2S at levels above the state standard could result in exposure to a disagreeable rotten eggs odor. The State does not regulate other odors.

California Air Toxics Program. The California Air Toxics Program was established in 1983, when the California Legislature adopted Assembly Bill (AB) 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances

in the air.[1] In the risk identification step, CARB and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a TAC in California. Since inception of the program, a number of such substances have been listed, including benzene, chloroform, formaldehyde, and particulate emissions from diesel-fueled engines, among others.[2] In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants as TACs.

In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of airborne toxic control measures (ATCMs), both for mobile and stationary sources. In 2004, CARB adopted an ATCM to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given time.

In addition to limiting exhaust from idling trucks, CARB adopted regulations on July 26, 2007 for off-road diesel construction equipment such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles to reduce emissions by installation of diesel particulate filters and encouraging the replacement of older, dirtier engines with newer emission-controlled models. In April 2021, CARB proposed a 2020 Mobile Source Strategy that seeks to move California to 100 percent zero-emission off-road equipment by 2035.

Assembly Bill 2588 Air Toxics "Hot Spots" Program. The AB 1807 program is supplemented by the AB 2588 Air Toxics "Hot Spots" program, which was established by the California Legislature in 1987. Under this program, facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks if present. In 1992, the AB 2588 program was amended by Senate Bill (SB) 1731 to require facilities that pose a significant health risk to the community to reduce their risk through implementation of a risk management plan.

Air Quality and Land Use Handbook: A Community Health Perspective. The *Air Quality and Land Use Handbook: A Community Health Perspective* provides important air quality information about certain types of facilities (e.g., freeways, refineries, rail yards, ports) that should be considered when siting sensitive land uses such as residences.[3] CARB provides recommended site distances from certain types of facilities when considering siting new sensitive land uses. The recommendations are advisory and should not be interpreted as defined "buffer zones." If a project is within the siting distance, CARB recommends further analysis. Where possible, CARB recommends a minimum separation between new sensitive land uses and existing sources.

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1 California Air Resources Board, California Air Toxics Program, www.arb.ca.gov/toxics/toxics.htm, last reviewed by CARB September 24, 2015.

2 California Air Resources Board, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.

3 California Air Resources Board, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.

Air Quality and Land Use Handbook. CARB published the *Air Quality and Land Use Handbook* (CARB Handbook) on April 28, 2005 to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

California Code of Regulations. The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by the state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in CCR Title 13 states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) used during construction shall be limited to five minutes at any location. In addition, Section 93115 in CCR Title 17 states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

Regional (South Coast Air Quality Management District)

The SCAQMD was created in 1977 to coordinate air quality planning efforts throughout Southern California. SCAQMD is the agency principally responsible for comprehensive air pollution control in the region. Specifically, SCAQMD is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain the CAAQS and NAAQS in the district. SCAQMD has jurisdiction over an area of 10,743 square miles consisting of Orange County; the non-desert portions of Los Angeles, Riverside, and San Bernardino counties; and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The Basin portion of SCAQMD's jurisdiction covers an area of 6,745 square miles. The Basin includes all of Orange County and the non-desert portions of Los Angeles (including the Project Area), Riverside, and San Bernardino counties.

Programs that were developed by SCAQMD to attain and maintain the CAAQS and NAAQS include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases. However, SCAQMD has primary authority over about 20 percent of NO_x emissions, a precursor to ozone formation. All projects in the SCAQMD jurisdiction are subject to SCAQMD rules and regulations, including, but not limited to the following:

- SCAQMD Rule 402, which states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

- SCAQMD Rule 403, would reduce the amount of particulate matter entrained in ambient air as a result of anthropogenic fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

- SCAQMD Rule 431.2, would require use of low-sulfur fuel in construction equipment.

- SCAQMD Rule 445 would prohibit the inclusion of wood burning fireplaces in any residences.

- SCAQMD Rule 1113, which limits the VOC content of architectural coatings.

- In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (with gross vehicle weight over 10,000 pounds) during construction would be limited to five minutes at any location.

- In accordance with Section 93115 in Title 17 of the California Code of Regulations, operation of any stationary, diesel-fueled, compression-ignition engines would meet specific fuel and fuel additive requirements and emissions standards.

Air Quality Management Plan. SCAQMD adopted the 2022 Air Quality Management Plan (AQMP) on December 2, 2022, updating the region's air quality attainment plan to address the "extreme" ozone non-attainment status for the Basin and the severe ozone non-attainment for the Coachella Valley Basin by laying a path for attainment by 2037. This includes reducing NOx emissions by 67 percent more than required by adopted rules and regulations in 2037. The AQMP calls on strengthening many stationary source controls and addressing new sources like wildfires, but still concludes that the region will not meet air quality standards without a significant shift to zero emission technologies and significant federal action. The 2022 AQMP relies on the growth assumptions in SCAG's 2020-2045 RTP/SCS.

Multiple Air Toxics Exposure Study V. To date, the most comprehensive study on air toxics in the Basin is the Multiple Air Toxics Exposure Study V, released in August 2021.[4] The report included refinements in aircraft and recreational boating emissions and diesel conversion factors. It finds a Basin average cancer risk of 455 in a million (population-weighted, multi-pathway), which represents a decrease of 54 percent compared to the estimate in MATES IV (page ES-13). The monitoring program measured more than 30 air pollutants, including both gases and particulates. The monitoring study was accompanied by computer modeling that estimated the risk of cancer from breathing toxic air pollution based on emissions and weather data. About 88 percent of the risk is attributed to emissions associated with mobile sources, with the remainder attributed to toxics emitted from stationary sources, which include large industrial operations, such as refineries and metal processing facilities, as well as smaller businesses such as gas stations and chrome plating facilities (page ES-12). The results indicate that

[4] South Coast Air Quality Management District, MATES-V Study. https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v

diesel PM is the largest contributor to air toxics risk, accounting on average for about 50 percent of the total risk (Figure ES-2).

Regional (Southern California Association of Governments)

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including the Transportation Conformity Rule and other applicable federal, state, and air district laws and regulations. As the federally designated Metropolitan Planning Organization (MPO) for the six-county Southern California region, SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. In addition, SCAG is a co-producer, with the SCAQMD, of the transportation strategy and transportation control measure sections of the AQMP for the Air Basin.

SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) on September 23, 2020. The RTP/SCS aims to address the transportation and air quality impacts of 3.7 million additional residents, 1.6 additional households, and 1.6 million additional jobs from 2016 to 2045. The Plan calls for $639 billion in transportation investments and reducing VMT by 19 percent per capita from 2005 to 2035. The updated plan accommodates 21.3 percent growth in population from 2016 (3,933,800) to 2045 (4,771,300) and a 15.6 percent growth in jobs from 2016 (1,848,300) to 2045 (2,135,900). The regional plan projects several benefits:

- Decreasing drive-along work commutes by three percent
- Reducing per capita VMT by five percent and vehicle hours traveled per capita by nine percent
- Increasing transit commuting by two percent
- Reducing travel delay per capita by 26 percent
- Creating 264,500 new jobs annually
- Reducing greenfield development by 29 percent by focusing on smart growth
- Locating six more percent household growth in High Quality Transit Areas (HQTAs), which concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability.
- Locating 15 percent more jobs in HQTAs
- Reducing $PM_{2.5}$ emissions by 4.1 percent
- Reducing GHG emissions by 19 percent by 2035

Local (City of Los Angeles)

City of Los Angeles General Plan Air Quality Element. The Air Quality Element of the City's General Plan was adopted on November 24, 1992, and sets forth the goals, objectives, and policies, which guide the City in the implementation of its air quality improvement programs and strategies. The Air Quality Element acknowledges the interrelationships among transportation and land use planning in meeting the City's mobility and air quality goals.

The Air Quality Element includes six key goals:

Goal 1: Good air quality in an environment of continued population growth and healthy economic structure.

Goal 2: Less reliance on single-occupant vehicles with fewer commute and non-work trips.

Goal 3: Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand management techniques.

Goal 4: Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.

Goal 5: Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting.

Goal 6: Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

Clean Up Green Up Ordinance. The City of Los Angeles adopted a Clean Up Green Up Ordinance (Ordinance Number 184,245) on April 13, 2016, which among other provisions, includes provisions related to ventilation system filter efficiency in mechanically ventilated buildings. This ordinance added Sections 95.314.3 and 99.04.504.6 to the Los Angeles Municipal Code (LAMC) and amended Section 99.05.504.5.3 to implement building standards and requirements to address cumulative health impacts resulting from incompatible land use patterns.

California Environmental Quality Act. In accordance with CEQA requirements, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City uses the SCAQMD's *CEQA Air Quality Handbook* and SCAQMD's supplemental online guidance/information for the environmental review of development proposals within its jurisdiction.

Land Use Compatibility. In November 2012, the Los Angeles City Planning Commission (CPC) issued an advisory notice (Zoning Information 2427) regarding the siting of sensitive land uses within 1,000 feet of freeways. The CPC deemed 1,000 feet to be a conservative distance to evaluate projects that house populations considered to be more at-risk from the negative effects of air pollution caused by freeway proximity. The CPC advised that applicants of projects requiring discretionary approval, located within 1,000 feet of a freeway and contemplating residential units and other sensitive uses (e.g., hospitals, schools, retirement homes) perform a Health Risk Assessment (HRA). The Project Site is 1,080 feet northeast of the northbound mainline of the Hollywood Freeway (US-101) and 1,450 feet northwest of the southbound mainline of the Harbor Freeway (SR-110).

On April 12, 2018, the City updated its guidance on siting land uses near freeways, resulting in an updated Advisory Notice effective September 17, 2018 requiring all proposed projects within 1,000 feet of a freeway adhere to the Citywide Design Guidelines, including those that address freeway proximity. It also recommended that projects consider avoiding location of sensitive uses like schools, day care facilities, and senior care centers in such projects, locate open space areas as far from the freeway, locate non-habitable uses (e.g., parking structures) nearest the freeway, and screen project sites with substantial vegetation and/or a wall barrier. Requirements for preparing HRAs were removed.

Existing Conditions

Pollutants and Effects

Air quality is defined by ambient air concentrations of seven specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. These specific pollutants, known as "criteria air pollutants," are defined as pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants include carbon monoxide (CO), ground-level ozone (O_3), nitrogen oxides (NO_X), sulfur oxides (SO_X), particulate matter ten microns or less in diameter (PM_{10}), particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), and lead (Pb). The following descriptions of each criteria air pollutant and their health effects are based on information provided by the SCAQMD.[5]

Carbon Monoxide (CO). CO is primarily emitted from combustion processes and motor vehicles due to incomplete combustion of fuel. Elevated concentrations of CO weaken the heart's contractions and lower the amount of oxygen carried by the blood. It is especially dangerous for people with chronic heart disease. Inhalation of CO can cause nausea, dizziness, and headaches at moderate concentrations and can be fatal at high concentrations.

Ozone (O_3). O_3 is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. An elevated level of O_3 irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

Nitrogen Dioxide (NO_2). NO_2 is a byproduct of fuel combustion and major sources include power plants, large industrial facilities, and motor vehicles. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), which reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10}. Nitrogen oxides irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_X is as a precursor to the formation of ozone.

Sulfur Dioxide (SO_2). Sulfur oxides (SO_X) are compounds of sulfur and oxygen molecules. SO_2 is the pre- dominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of sulfur dioxide aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO_2 potentially causes wheezing, shortness of breath, and coughing. High

[5] South Coast Air Quality Management District, Final Program Environmental Impact Report for the 2012 AQMP, December 7, 2012.

levels of particulates appear to worsen the effect of sulfur dioxide, and long-term exposures to both pollutants leads to higher rates of respiratory illness.

Particulate Matter (PM_{10} and $PM_{2.5}$). The human body naturally prevents the entry of larger particles into the body. However, small particles, with an aerodynamic diameter equal to or less than 10 microns (PM_{10}), and even smaller particles with an aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$), can enter the body and become trapped in the nose, throat, and upper respiratory tract. These small particulates can potentially aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM_{10} and $PM_{2.5}$. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates can become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

Lead (Pb). Lead is emitted from industrial facilities and from the sanding or removal of old lead-based paint. Smelting or processing the metal is the primary source of lead emissions, which is primarily a regional pollutant. Lead affects the brain and other parts of the body's nervous system. Exposure to lead in very young children impairs the development of the nervous system, kidneys, and blood forming processes in the body.

State-Only Criteria Pollutants

Visibility-Reducing Particles. Deterioration of visibility is one of the most obvious manifestations of air pollution and plays a major role in the public's perception of air quality. Visibility reduction from air pollution is often due to the presence of sulfur and NO_X, as well as PM.

Sulfates (SO_4^{2-}). Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized during the combustion process and subsequently converted to sulfate compounds in the atmosphere. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide (H_2S). 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. Breathing H_2S at levels above the state standard could result in exposure to a very disagreeable odor.

Vinyl Chloride. Vinyl chloride is a colorless, flammable gas at ambient temperature and pressure. It is also highly toxic and is classified as a known carcinogen by the American Conference of Governmental Industrial Hygienists and the International Agency for Research on Cancer. At room temperature, vinyl chloride is a gas with a sickly-sweet odor that is easily condensed. However, it is stored at cooler temperatures as a liquid. Due to the hazardous nature of vinyl chloride to human health, there are no end products that use vinyl chloride in its monomer form. Vinyl chloride is a chemical intermediate, not a final product. It is an important industrial chemical chiefly used to produce polyvinyl chloride (PVC).

The process involves vinyl chloride liquid fed to polymerization reactors where it is converted from a monomer to a polymer PVC. The final product of the polymerization process is PVC in either a flake or pellet form. Billions of pounds of PVC are sold on the global market each year. From its flake or pellet form, PVC is sold to companies that heat and mold the PVC into end products such as PVC pipe and bottles. Vinyl chloride emissions are historically associated primarily with landfills.

Toxic Air Contaminants (TACs)

TACs refer to a diverse group of "non-criteria" air pollutants that can affect human health but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed above but because their effects tend to be local rather than regional. TACs are classified as carcinogenic and noncarcinogenic, where carcinogenic TACs can cause cancer and noncarcinogenic TAC can cause acute and chronic impacts to different target organ systems (e.g., eyes, respiratory, reproductive, developmental, nervous, and cardiovascular). CARB and OEHHA determine if a substance should be formally identified, or "listed," as a TAC in California. A complete list of these substances is maintained on CARB's website.[6]

Diesel particulate matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the state as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 micrometer (μm)), including a subgroup of ultrafine particles (ultrafine particles have a diameter less than 0.1 μm). Collectively, these particles have a large surface area which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and cancer-causing substances.

Exposure to DPM may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. DPM levels and resultant potential health effects may be higher in close proximity to heavily traveled roadways with substantial truck traffic or near industrial facilities. According to CARB, DPM exposure may lead to the following adverse health effects: (1) aggravated asthma; (2) chronic bronchitis; (3) increased respiratory and cardiovascular hospitalizations; (4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease.[7,8]

Project Site

The Project Site is located within the South Coast Air Basin (the Basin); named so because of its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys or basins below. The 6,745-square-mile Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. It is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east; and the San Diego County line to the south. Ambient pollution concentrations recorded in Los

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6 California Air Resources Board, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.

7 California Air Resources Board, Overview: Diesel Exhaust and Health, www.arb.ca.gov/research/diesel/diesel-health.htm, last reviewed by CARB April 12, 2016.

8 California Air Resources Board, Fact Sheet: Diesel Particulate Matter Health Risk Assessment Study for the West Oakland Community: Preliminary Summary of Results, March 2008.

Angeles County portion of the Basin are among the highest in the four counties comprising the Basin. USEPA has classified Los Angeles County as nonattainment areas for O_3, $PM_{2.5}$, and lead. This classification denotes that the Basin does not meet the NAAQS for these pollutants. In addition, under the CCAA, the Los Angeles County portion of the Basin is designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. The air quality within the Basin is primarily influenced by a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, industry, and meteorology.

Air pollutant emissions are generated in the local vicinity by stationary and area-wide sources, such as commercial activity, space and water heating, landscaping maintenance, consumer products, and mobile sources primarily consisting of automobile traffic.

Air Pollution Climatology. The topography and climate of Southern California combine to make the Basin an area of high air pollution potential. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cooler surface layer which inhibits the pollutants from dispersing upward. Light winds during the summer further limit ventilation. Additionally, abundant sunlight triggers photochemical reactions which produce O_3 and the majority of particulate matter.

Air Monitoring Data. The SCAQMD monitors air quality conditions at 38 source receptor areas (SRA) throughout the Basin. The Project Site is located in SCAQMD's Central Los Angeles receptor area. Historical data from the area was used to characterize existing conditions in the vicinity of the Project area. Table 2 shows pollutant levels, State and federal standards, and the number of exceedances recorded in the area from 2019 through 2021. The one-hour State standard for O_3 was exceeded 16 times during this three-year period, including fourteen times in 2020. The federal standard was exceeded 26 times in that same period. In addition, the daily State standard for PM_{10} was exceeded 203 times. The daily federal standard for $PM_{2.5}$ was exceeded 15 times. CO and NO_2 levels did not exceed the CAAQS from 2019 to 2021 for 1-hour (and 8-hour for CO).

Table 2
Ambient Air Quality Data

Pollutants and State and Federal Standards	Maximum Concentrations and Frequencies of Exceedance Standards		
	2019	2020	2021
Ozone (O_3)			
Maximum 1-hour Concentration (ppm)	0.080	0.185	0.099
Days > 0.09 ppm (State 1-hour standard)	0	14	1
Days > 0.070 ppm (Federal 8-hour standard)	2	22	2
Carbon Monoxide (CO_2)			
Maximum 1-hour Concentration (ppm)	2.0	1.9	2.0
Days > 20 ppm (State 1-hour standard)	0	0	0
Maximum 8-hour Concentration (ppm)	1.6	1.5	1.6
Days > 9.0 ppm (State 8-hour standard)	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour Concentration (ppm)	0.0697	0.0618	0.0778
Days > 0.18 ppm (State 1-hour standard)	0	0	0
PM_{10}			
Maximum 24-hour Concentration ($\mu g/m^3$)	62	77	64

Days > 50 µg/m^3 (State 24-hour standard)	3	24	3
$PM_{2.5}$			
Maximum 24-hour Concentration (µg/m^3)	43.5	47.3	61.0
Days > 35 µg/m^3 (Federal 24-hour standard)	1	2	12
Sulfur Dioxide (SO_2)			
Maximum 24-hour Concentration (ppb)	10.0	3.8	2.2
Days > 0.04 ppm (State 24-hour standard)	0	0	0
ppm = parts by volume per million of air. µg/m^3 = micrograms per cubic meter. N/A = not available at this monitoring station. Source: SCAQMD annual monitoring data at Central LA subregion (http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year) accessed August 20, 2023.			

Existing Health Risk in the Surrounding Area. Based on the MATES-V model, the calculated cancer risk in the Project area (zip code 90026) is approximately 659 in a million.[9] The cancer risk in this area is predominately related to nearby sources of diesel particulate matter (e.g., diesel trucks and traffic on the Hollywood Freeway 1,080 feet to the southwest and Harbor Freeway 1,450 feet to the southeast). In general, the risk at the Project Site is higher than 98 percent of the population across the South Coast Air Basin.

The Office of Environmental Health Hazard Assessment, on behalf of the California Environmental Protection Agency (CalEPA), provides a screening tool called CalEnviroScreen that can be used to help identify California communities disproportionately burdened by multiple sources of pollution. According to CalEnviroScreen, the Project Site (Census tract 6037197700) is located in the 91st percentile, which means the Project Site has an overall environmental pollution burden higher than at least 91 percent of other communities within California.[10]

Sensitive Receptors. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The California Air Resources Board (CARB) has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The Project Site is located in a residential area within the Victor Heights neighborhood. Sensitive receptors within 0.25 miles of the Project Site include, but are not limited to, the following representative sampling:

- Residences, Everett Street (west side); as close as five feet east of the Project Site.

[9] South Coast Air Quality Management District, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V), MATES V Interactive Carcinogenicity Map, 2021, https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/home/?data_id=dataSource_105-a5ba9580e3aa43508a793fac819a5a4d%3A26&views=view_39%2Cview_1, accessed August 23, 2023.

[10] Office of Environmental Health Hazard Assessment, https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40, accessed August 23, 2023.

- Residential structures[11], 1251-1255 Sunset Boulevard, five feet north of the Project Site.
- Residences, Everett Street (east side); 60 feet east of the Project Site.
- Residences, Sunset Boulevard (west side); as close as 100 feet west of the Project Site.
- Residences, 1190 Sunset Boulevard; 110 feet west of the Project Site.
- Residences, 1271 Sunset Boulevard; 200 feet north of the Project Site.
- Everett Park, 250 feet east of the Project Site.
- Preschool, 707 Kensington Road; about 500 feet west of the Project Site.

Existing Project Site Emissions. The Project Site is currently vacant of any improvements. As such, there are no anthropogenic emissions of criteria pollutants from the Project Site.

Project Impacts

Methodology

The air quality analysis conducted for the Project is consistent with the methods described in the SCAQMD CEQA Air Quality Handbook (1993 edition), as well as the updates to the CEQA Air Quality Handbook, as provided on the SCAQMD website. The SCAQMD recommends the use of the California Emissions Estimator Model (CalEEMod, version 2022.1.1.17 as of August 2023) as a tool for quantifying emissions of air pollutants that will be generated by constructing and operating development projects. The analyses focus on the potential change in air quality conditions due to Project implementation. Air pollutant emissions would result from both construction and operation of the Project. Specific methodologies used to evaluate these emissions are discussed below.

Construction. Sources of air pollutant emissions associated with construction activities include heavy-duty off-road diesel equipment and vehicular traffic to and from the Project construction site. Project-specific information was provided describing the schedule of construction activities and the equipment inventory required from the Applicant. Details pertaining to the schedule and equipment can be found in the Technical Appendix to this analysis. The CalEEMod model provides default values for daily equipment usage rates and worker trip lengths, as well as emission factors for heavy-duty equipment, passenger vehicles, and haul trucks that have been derived by the CARB. Maximum daily emissions were quantified for each construction activity based on the number of equipment and daily hours of use, in addition to vehicle trips to and from the Project Site.

The SCAQMD recommends that air pollutant emissions be assessed for both regional scale and localized impacts. The regional emissions analysis includes both on-site and off-site sources of emissions, while the localized emissions analysis focuses only on sources of emissions that would be located on the Project Site.

Localized impacts were analyzed in accordance with the SCAQMD Localized Significance Threshold (LST) methodology.[12] The localized effects from on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the Project according to the SCAQMD's LST methodology, which uses on-site mass emission look-up tables and Project-specific modeling, where

11 Note these structures are abandoned and have been since at least early 2021. However, for conservative analysis, we assume these could be sensitive receptors that could be re-occupied.

12 South Coast Air Quality Management District, Final Localized Significance Methodology, revised July 2008.

appropriate.[13] SCAQMD provides LSTs applicable to the following criteria pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$. SCAQMD does not provide an LST for SO_2 since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant. Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. SCAQMD provides LST mass rate look-up tables for projects with active construction areas that are less than or equal to five acres. If the project exceeds the LST look-up values, then the SCAQMD recommends that project-specific air quality modeling must be performed. Please refer to **Threshold b** below, for the analysis of localized impacts from on-site construction activities. In accordance with SCAQMD guidance, maximum daily emissions of NO_X, CO, PM_{10}, and $PM_{2.5}$ from on-site sources during each construction activity were compared to LST values for a two-acre site having sensitive receptors within 25 meters (82 feet).[14] This is appropriate given the 2.459-acre site and the proximity of sensitive receptors as close as five feet from the Project Site.

The Basin is divided into 38 SRAs, each with its own set of maximum allowable LST values for on-site emissions sources during construction and operations based on locally monitored air quality. Maximum on-site emissions resulting from construction activities were quantified and assessed against the applicable LST values.

The significance criteria and analysis methodologies in the SCAQMD's CEQA Air Quality Handbook were used in evaluating impacts in the context of the CEQA significance criteria listed below. The SCAQMD localized significance thresholds (LSTs) for NO_2, CO, and PM_{10} were initially published in June 2003 and revised in July 2008.[15] The LSTs for $PM_{2.5}$ were established in October 2006.[16] Updated LSTs were published on the SCAQMD website on October 21, 2009.[17] Table 3 presents the significance criteria for both construction and operational emissions.

13 South Coast Air Quality Management District, LST Methodology Appendix C-Mass Rate LST Look-Up Table, October 2009.

14 South Coast Air Quality Management District, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2008.

15 South Coast Air Quality Management District, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2008.

16 South Coast Air Quality Management District, Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds, October 2006.

17 South Coast Air Quality Management District, Final Localized Significance Threshold Methodology Appendix C – Mass Rate LST Look-Up Tables, October 21, 2009.

Table 3
SCAQMD Emissions Thresholds

Criteria Pollutant	Construction Emissions		Operation Emissions	
	Regional	Localized /a/	Regional	Localized /a/
Volatile Organic Compounds (VOC)	75	--	55	--
Nitrogen Oxides (NO_X)	100	108	55	108
Carbon Monoxide (CO)	550	1,048	550	1,048
Sulfur Oxides (SO_X)	150	--	150	--
Respirable Particulates (PM_{10})	150	8	150	2
Fine Particulates ($PM_{2.5}$)	55	5	55	2

/a/ Localized significance thresholds assumed a two-acre and 25-meter (82-foot) receptor distance in the Central LA source receptor area. The SCAQMD has not developed LST values for VOC or SO_X. Pursuant to SCAQMD guidance, sensitive receptors closer than 25 meters to a construction site are to use the LSTs for receptors at 25 meters (SCAQMD Final Localized Significance Threshold Methodology, June 2008).

Source: SCAQMD, South Coast AQMD Air Quality Significance Thresholds, 2019

Operations. CalEEMod also generates estimates of daily and annual emissions of air pollutants resulting from future operation of a project. Operational emissions of air pollutants are produced by mobile sources (vehicular travel) and stationary sources (utilities demand). Utilities for the Project Site are provided by the Los Angeles Department of Water and Power (LADWP) for electricity and Southern California Gas for natural gas. CalEEMod has derived default emissions factors for electricity and natural gas usage that are applied to the size and land use type of the Project in question. CalEEMod also generates estimated operational emissions associated water use, wastewater generation, and solid waste disposal.

Similar to construction, SCAQMD's CalEEMod software was used for the evaluation of Project emissions during operation. CalEEMod was used to calculate on-road fugitive dust, architectural coatings, landscape equipment, energy use, mobile source, and stationary source emissions.[18] To determine if a significant air quality impact would occur, the net increase in regional and local operational emissions generated by the Project was compared against the SCAQMD's significance thresholds.[19] Details describing the operational emissions of the Project can be found in in the Technical Appendix.

Toxic Air Contaminants Impacts (Construction and Operations). Potential TAC impacts are evaluated by conducting a qualitative analysis consistent with the CARB Handbook followed by a more detailed analysis (i.e., dispersion modeling), as necessary. The qualitative analysis consists of reviewing the Project to identify any new or modified TAC emissions sources. If the qualitative evaluation does not rule out significant impacts from a new source, or modification of an existing TAC emissions source, a more detailed analysis is conducted.

[18] Energy consumption estimates with CalEEMod 2022.1.1.17 are based on the California Energy Commission's 2020 Residential Appliance Saturation Survey (residential uses) and 2021 Commercial Forecast database, both of which reflected the 2019 Title 24 energy efficiency standards. These energy consumption estimates were adjusted to reflect the 2022 Title 24 standards that cumulatively produce a 0.49 percent reduction in electricity use and 0.45 percent reduction in natural gas use when compared to the 2019 standards.

[19] South Coast Air Quality Management District, Air Quality Significance Thresholds, revised March 2015. SCAQMD based these thresholds, in part on the federal Clean Air Act and, to enable defining "significant" for CEQA purposes, defined the setting as the South Coast Air Basin. (See SCAQMD, CEQA Air Quality Handbook, April 1993, pp. 6-1-6-2).

Thresholds of Significance

State CEQA Guidelines Appendix G

Would the Project:

a) *Conflict with or obstruct implementation of the applicable air quality plan;*

b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard;*

c) *Expose sensitive receptors to substantial pollutant concentrations; or*

d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

City and SCAQMD Thresholds

For this analysis the Appendix G Thresholds are relied upon. The analysis utilizes factors and considerations recommended by the City of Los Angeles and SCAQMD Thresholds, as appropriate, to assist in answering the Appendix G Threshold questions.

(a) Construction

The City recommends that determination of significance be made on a case-by-case basis, considering the following criteria to evaluate construction-related air emissions:

(i) Combustion Emissions from Construction Equipment

- Type, number of pieces and usage for each type of construction equipment;
- Estimated fuel usage and type of fuel (diesel, natural gas) for each type of equipment; and
- Emission factors for each type of equipment.

(ii) Fugitive Dust—Grading, Excavation and Hauling

- Amount of soil to be disturbed on-site or moved off-site;
- Emission factors for disturbed soil;
- Duration of grading, excavation and hauling activities;
- Type and number of pieces of equipment to be used; and
- Projected haul route.

(iii) Fugitive Dust—Heavy-Duty Equipment Travel on Unpaved Road

- Length and type of road;
- Type, number of pieces, weight and usage of equipment; and
- Type of soil.

(iv) Other Mobile Source Emissions

- Number and average length of construction worker trips to Project Site, per day; and
- Duration of construction activities.

In addition, the following criteria set forth in the SCAQMD's *CEQA Air Quality Handbook* serve as quantitative air quality standards to be used to evaluate project impacts under the Appendix G Thresholds. Under these thresholds, a significant threshold would occur when:[20]

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 100 pounds per day for NO_X; (2) 75 pounds a day for VOC; (3) 150 pounds per day for PM_{10} or SO_X; (4) 55 pounds per day for $PM_{2.5}$; and (5) 550 pounds per day for CO.

- Maximum on-site daily localized emissions exceed the LST, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m^3] over a 1-hour period or 9.0 ppm [10,350 µg/m^3] averaged over an 8-hour period) and NO_2 (0.18 ppm [339 µg/m^3] over a 1-hour period, 0.1 ppm [188 µg/m^3] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [57 µg/m^3] averaged over an annual period).

- Maximum on-site localized PM_{10} or $PM_{2.5}$ emissions during construction exceed the applicable LSTs, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed the incremental 24-hour threshold of 10.4 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.

(b) Operation

The City bases the determination of significance of operational air quality impacts on criteria set forth in the SCAQMD's *CEQA Air Quality Handbook.*[21] As discussed above, the City uses Appendix G as the thresholds of significance for this analysis. Accordingly, the following serve as quantitative air quality standards to be used to evaluate project impacts under the Appendix G thresholds. Under these thresholds, a significant threshold would occur when:

- Operational emissions exceed 10 tons per year of volatile organic gases or any of the following SCAQMD prescribed threshold levels: (1) 55 pounds a day for VOC;[22] (2) 55 pounds per day for NO_X; (3) 550 pounds per day for CO; (4) 150 pounds per day for SO_X; (5) 150 pounds per day for PM_{10}; and (6) 55 pounds per day for $PM_{2.5}$.[23]

- Maximum on-site daily localized emissions exceed the LST, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 parts per million (ppm) over a 1-hour period or 9.0 ppm averaged over an

20 South Coast Air Quality Management District, Air Quality Significance Thresholds, revised March 2015.

21 South Coast Air Quality Management District, Air Quality Significance Thresholds, revised March 2015.

22 For purposes of this analysis, emissions of VOC and reactive organic compounds (ROG) are used interchangeably since ROG represents approximately 99.9 percent of VOC emissions.

23 South Coast Air Quality Management District, Quality Significance Thresholds, www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf, last updated March 2015.

8-hour period) and NO_2 (0.18 ppm over a 1-hour period, 0.1 ppm over a 3-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm averaged over an annual period).[24]

- Maximum on-site localized operational PM_{10} and $PM_{2.5}$ emissions exceed the incremental 24-hour threshold of 2.5 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.[25]

- The Project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively; or

- The Project creates an odor nuisance pursuant to SCAQMD Rule 402.

(c) Toxic Air Contaminants

The City recommends that the determination of significance shall be made on a case-by-case basis, considering the following criteria to evaluate TACs:

- Would the project use, store, or process carcinogenic or non-carcinogenic toxic air contaminants which could result in airborne emissions?

In assessing impacts related to TACs in this section, the City uses Appendix G as the thresholds of significance. The criteria identified above will be used where applicable and relevant to assist in analyzing the Appendix G thresholds. In addition, the following criteria set forth in the SCAQMD's *CEQA Air Quality Handbook* serve as quantitative air quality standards to be used to evaluate project impacts under Appendix G thresholds. Under these thresholds, a significant threshold would occur when:[26]

- The Project results in the exposure of sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0.[27] For projects with a maximum incremental cancer risk between 1 in one million and 10 in one million, a project would result in a significant impact if the cancer burden exceeds 0.5 excess cancer cases.

(d) Consistency with Applicable Air Quality Plans

CEQA Guidelines Section 15125 requires an analysis of project consistency with applicable governmental plans and policies. This analysis is conducted to assess potential project impacts against

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24 South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, revised July 2008.

25 South Coast Air Quality Management District, Final—Methodology to Calculate Particulate Matter (PM) 2.5 and $PM_{2.5}$ Significance Thresholds, October 2006.

26 South Coast Air Quality Management District, CEQA Air Quality Handbook, April 1993, Chapter 6 (Determining the Air Quality Significance of a Project) and Chapter 10 (Assessing Toxic Air Pollutants).

27 Hazard index is the ratio of a toxic air contaminant's concentration divided by its Reference Concentration, or safe exposure level. If the hazard index exceeds one, people are exposed to levels of TACs that may pose noncancer health risks.

Threshold (a) from the Appendix G thresholds. In accordance with the SCAQMD's *CEQA Air Quality Handbook*, the following criteria are used to evaluate a project's consistency with the AQMP:[28]

- Will the Project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations;
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP?
- Will the Project exceed the assumptions utilized in preparing the AQMP?
  - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the Project include air quality mitigation measures; or
  - To what extent is Project development consistent with the AQMP land use policies?

The Project's impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD's AQMP and SCAG regional plans and policies. In addition, the Project's consistency with the City of Los Angeles General Plan Air Quality Element is discussed.

Project Design Features. The Project would comply with the 2022 Los Angeles Green Building Code (LAGBC),[29] which will build upon and set higher standards than those in the 2022 California Green Building Standards Code (CalGreen, effective January 1, 2023).[30] Further energy efficiency and sustainability features would include native plants and drip/subsurface irrigation systems, individual metering or sub metering for water use, leak detection systems, and electric vehicle charging capacity. The Project will be required to be all-electric for cooking, heating/cooling, and water heating within both buildings. The only exception is cooking equipment within kitchens that could be located in the 9,462 square feet of commercial (i.e., restaurant) space.[31]

The Project's infill location would promote the concentration of development in an urban location with extensive infrastructure and access to public transit facilities. The Project's proximity to public transportation would reduce vehicle miles traveled for residents, workers, and visitors who want options to driving cars.

28 South Coast Air Quality Management District, CEQA Air Quality Handbook, April 1993, p. 12-3.

29 City of Los Angeles Department of Building and Safety: http://ladbs.org/forms-publications/forms/green-building.

30 California Building Codes: http://www.bsc.ca.gov/Codes.aspx.

31 Los Angeles Ordinance No. 187,714. https://www.ladbs.org/services/green-building-sustainability#all-electric

Analysis of Project Impacts

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

Less Than Significant Impact. The Project's air quality emissions would not exceed any state or federal standards. Therefore, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.

With respect to the determination of consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2020-2045 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these three criteria.

- Is the project consistent with the population, housing, and employment growth projections upon which AQMP forecasted emission levels are based?

A project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2022 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG's RTP. The General Plan serves as a comprehensive, long-term plan for future development of the City.

The 2020-2045 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review. The 2020-2045 RTP/SCS accommodates 4,771,300 persons; 1,793,000 households; and 2,135,900 jobs in the City of Los Angeles by 2045.

The Project is projected to add a residential population of approximately 773 people to the Project Site based on the 327 dwelling units proposed.[32] The Project's residential population would represent approximately 0.09 percent of the forecast population growth between 2016 and 2045 in the RTP/SCS.

Development of the Project also would result in approximately 38 employment positions on-site, based on the 9,462 square feet of commercial space proposed.[33] The Project's employment population would represent approximately 0.01 percent of the forecast job growth between 2016 and 2045. Thus, the Project's estimated population and employment impacts would not help produce job growth that exceeds the capacity that is accommodated in the 2022 AQMP. As a result, the Project would be consistent with the projections in the AQMP.

[32] Fehr & Peers, Draft Transportation Assessment – Sunset + Everett Project; October 2023. Estimates from City of Los Angeles VMT Calculator, version 1.3.

[33] Ibid.

- Does the project implement feasible air quality mitigation measures?

As discussed below under Thresholds (b), (c), and (d), the Project would not result in any significant air quality impacts and therefore would not require mitigation. In addition, the Project would comply with all applicable regulatory standards as required by SCAQMD. Furthermore, with compliance with the regulatory requirements identified above, no significant air quality impacts would occur. As such, the proposed Project meets this AQMP consistency criterion.

- To what extent is project development consistent with the land use policies set forth in the AQMP?

With regard to land use developments such as the Project, the AQMP's air quality policies focus on the reduction of vehicle trips and vehicle miles traveled (VMT). The Project would serve to implement a number of land use policies of the City of Los Angeles, SCAQMD, and SCAG. The Project would be designed and constructed to support and promote environmental sustainability. The Project represents an infill development within an existing urbanized area that would concentrate more housing and population within a high quality transit area (HQTA). "Green" principles are incorporated throughout the Project to comply with the City of Los Angeles Green Building Code and the California Green Building Standards Code (CALGreen) through energy conservation, water conservation, and waste reduction features. In accordance with City Ordinance 187714, the Project would be all-electric with the exception of any cooking equipment associated with any restaurants or eating facilities and any gas-powered emergency backup systems.

The air quality plan applicable to the Project area is the 2022 AQMP, the current management plan for progression toward compliance with State and federal clean air requirements. The Project would be required to comply with all regulatory measures set forth by the SCAQMD. Implementation of the Project would not interfere with air pollution control measures listed in the 2022 AQMP. In addition, as demonstrated in the following analyses, the Project would not result in significant emissions that would jeopardize regional or localized air quality standards.

The Project Site is classified as "General Commercial" in the General Plan Framework, a classification that when combined with the many zoning classifications on the Project Site conditionally allow multi-family housing and commercial uses such as those proposed by the Project. As such, the RTP/SCS' assumptions about growth in the City accommodate the projected population and jobs on the Project Site. As a result, the Project would be consistent with the growth assumptions in the City's General Plan. Because the AQMP accommodates growth forecasts from local General Plans, the emissions associated with this Project are accounted for and mitigated in the region's air quality attainment plans. The air quality impacts of development on the Project Site are accommodated in the region's emissions inventory for the 2020-2045 RTP/SCS and 2022 AQMP. Therefore, Project impacts with respect to AQMP consistency would be less than significant.

City of Los Angeles Policies

The Project would offer convenient access to public transit and opportunities for walking and biking (including the provision of bicycle parking), thereby facilitating a reduction in VMT. In addition, the Project would be consistent with the existing land use pattern in the vicinity that concentrates urban density along major arterials and near transit options based on the following:

- The Project Site is within a HQTA, which reflects areas with rail transit service or bus service where lines have peak headways of less than 15 minutes.[34]
- The Project Site is located in a Transit Priority Area, which are locations within one-half mile of a major transit stop with bus or rail transit service with frequencies of 15 minutes or less.
- The Project Site's location within an HQTA and TPA is due to the existence of a Major Transit Stop at the intersection of Sunset Boulevard/Cesar Chavez Avenue and Figueroa Street, 2,075 feet southeast of the Site, which is served by Los Angeles County Metropolitan Transportation Authority (Metro) bus lines 4, 55, and 60 and Los Angeles Department of Transportation (LADOT) Lincoln Heights/Chinatown line, and at Edgeware Road and Temple Street, 1,515 feet southwest of the Site, which is served by Metro bus lines 10/48, 92 and LADOT DASH Pico Union line. The lines have under 15-minute headways during peak hours.[35]
- There is substantial public transit service in the area, including:
  - Metro Line 4, which connects Downtown Los Angeles with Santa Monica via east-west arterials like Sunset Boulevard, with a stop in front of the Project Site.
  - Metro Line 10/48 connects Downtown Los Angeles with West Hollywood via Temple Street, with a stop at Edgeware Road, 1,515 feet southwest of the Project Site.
  - Metro Line 55, which connects Downtown Los Angeles with Willowbrook via east-west arterials like Figueroa Street, with a stop at Cesar Chavez Avenue 2,075 feet southeast of the Project Site.
  - Metro Line 60 connects Downtown Los Angeles with the Artesia rail station via east-west arterials like Sunset Boulevard, with a stop at Figueroa Street 2,075 feet southeast of the Project Site.
  - Metro Line 92 connects Downtown Los Angeles with Sylmar via Edgeware Way, with a stop at Bellevue, 1,275 feet southwest of the Project Site.
  - LADOT DASH (Lincoln Heights) shuttle service. The nearest stop is on Edgeware Way, with a stop at Bellevue Avenue, 1,275 feet southwest of the Project Site.
  - LADOT DASH (Pico Union) shuttle service. The nearest stop is on Cesar Chavez Avenue at Figueroa Street, 2,075 feet southeast of the Project Site.
- Metro's Grand Avenue Arts/Bunker Hill rail station is located 4,500 feet south of the Project Site, where the A (Blue) and B (Red) Lines provide rail access to the region.
- The project will provide 21 short- and 162 long-term bicycle parking spaces on-site.
- Metro operates a bikeshare station at Sunset Boulevard and Lilac Place, 1,450 feet north of the Project Site, as well as a location on Figueroa Street and Cesar Chavez Avenue, 2,000 feet southeast of the Project Site.

The City's General Plan Air Quality Element identifies 30 policies with specific strategies for advancing the City's clean air goals. As illustrated in Table 4, the Project is consistent with the applicable policies in the Air Quality Element, as the Project would implement sustainability features that would reduce

[34] Southern California Association of Governments Data Portal https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_active-transportation.pdf?1606001530,

[35] Major Transit Stop is a site containing a rail station or the intersection of two or more bus routes with a service interval of 15 minutes or less during the morning and afternoon peak commute periods. The stations or bus routes may be existing, under construction or included in the most recent Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP).

vehicular trips, reduce VMT, and encourage the use of alternative modes of transportation. Therefore, the Project would result in a less than significant impact related to consistency with the Air Quality Element.

Table 4
Project Consistency with City of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
Policy 1.3.1. Minimize particulate emissions from construction sites.	**Consistent.** The Project would minimize particulate emissions during construction through best practices and/or SCAQMD rules (e.g., Rule 403, Fugitive Dust).
Policy 1.3.2. Minimize particulate emissions from unpaved roads and parking lots associated with vehicular traffic.	**Not Applicable.** The Project would not involve use of unpaved roads or parking lots.
Policy 2.1.1. Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce vehicle trips and/or VMT as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.	**Consistent.** The proposed development would include retail and restaurant employees that could access transportation options to driving to work. The Project Site is well-served by public transit, including Metro Lines 4 and 60 on Sunset Boulevard, Lines 10/48 and 92 on Edgeware Road, Line 55 on Figueroa Street, as well as LADOT DASH (Lincoln Heights) circulator shuttle service on Cesar Chavez Avenue. Metro's Grand Avenue Arts/Bunker Hill rail station is 4,500 feet south of the Project Site, where the A (Blue) and B (Red) Lines provide rail access to the region. On-site bicycle parking for residents and workers can support bicycle transport in lieu of driving and two Metro bikeshare stations provide other options for active transportation. In addition, the live/work units will help reduce travel demand.
Policy 2.1.2. Facilitate and encourage the use of telecommunications (i.e., telecommuting) in both the public and private sectors, in order to reduce work trips.	**Consistent.** Residents could use high-speed telecommunications services as an alternative to driving to work. A June 2020 study by the National Bureau of Economic Research found that 37 percent of jobs can be performed entirely from home (https://www.nber.org/papers/w26948). As such, the Proposed Project could help reduce commuting to work through telecommuting.
Policy 2.2.1. Discourage single-occupant vehicle use through a variety of measures such as market incentive strategies, mode-shift incentives, trip reduction plans and ridesharing subsidies.	**Consistent.** As the Project Site is subject to AB 2097 and therefore not required to provide any minimum amount of vehicular parking, the Project would discourage car ownership and resulting single-occupant vehicle use because of the limited parking (263 spaces) for residents and merchants.
Policy 2.2.2. Encourage multi-occupant vehicle travel and discourage single-occupant vehicle travel by instituting parking management practices.	**Consistent.** As noted above, AB 2097 allows the Project's garage to be limited to parking for 263 vehicles. This would reduce car ownership for residents and resulting single-occupant vehicle trips. The development would provide transit and active transportation options to residents as an option to driving.

Table 4
Project Consistency with City of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
Policy 2.2.3. Minimize the use of single-occupant vehicles associated with special events or in areas and times of high levels of pedestrian activities.	**Not Applicable.** The Project would not include facilities for special events.
Policy 3.2.1. Manage traffic congestion during peak hours.	**Consistent.** The Project is a low traffic generator because of the nature of residential uses, which generate peak hour vehicle trips that are lower than commercial, retail, and restaurant uses. Further, the Project would also minimize traffic congestion based on its location near transit opportunities, which would encourage the use of alternative modes of transportation. Residents, workers, and visitors can use public transit, including Metro Lines 4 and 60 on Sunset Boulevard, Lines 10/48 and 92 on Edgeware Road, Line 55 on Figueroa Street, as well as LADOT DASH (Lincoln Heights) circulator shuttle service on Cesar Chavez Avenue. Metro's Grand Avenue Arts/Bunker Hill rail station is 4,500 feet south of the Project Site, where the A (Blue) and B (Red) Lines provide rail access to the region. On-site bicycle parking for residents and workers can support bicycle transport in lieu of driving and two Metro bikeshare stations provide other options for active transportation. In addition, the live/work units will help reduce travel demand.
Policy 4.1.1. Coordinate with all appropriate regional agencies on the implementation of strategies for the integration of land use, transportation, and air quality policies.	**Consistent.** The Project is being entitled through the City of Los Angeles, which coordinates with SCAG, Metro, and other regional agencies on the coordination of land use, air quality, and transportation policies.
Policy 4.1.2. Ensure that project level review and approval of land use development remains at the local level.	**Consistent.** The Project would be entitled and environmentally cleared at the local level. The Project would not inhibit the implementation of this policy.
Policy 4.2.1. Revise the City's General Plan/Community Plans to achieve a more compact, efficient urban form and to promote more transit-oriented development and mixed-use development.	**Not Applicable.** This policy calls for City updates to its General Plan. The Project would not inhibit the implementation of this policy.
Policy 4.2.2. Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.	**Consistent.** The Project would be infill development that would provide the City's residents with proximate access to jobs and services at this Project Site.
Policy 4.2.3. Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	**Consistent.** The Project would promote public transit, active transportation, and alternative fuel vehicles for residents, workers, and visitors, who can use public transit, including Metro Lines 4 and 60 on Sunset Boulevard, Lines 10/48 and 92 on Edgeware Road, Line 55 on Figueroa Street, as well as LADOT DASH (Lincoln Heights) circulator shuttle service on Cesar Chavez Avenue. Metro's Grand Avenue Arts/Bunker Hill

Table 4
Project Consistency with City of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
	rail station is 4,500 feet south of the Project Site, where the A (Blue) and B (Red) Lines provide rail access to the region. On-site bicycle parking for residents and workers can support bicycle transport in lieu of driving and two Metro bikeshare stations provide other options for active transportation. In addition, the live/work units will help reduce travel demand. The Project would also include 26 electric vehicle charging stations and 66 more spaces with conduits and supplies for future charging stations.
Policy 4.2.4. Require that air quality impacts be a consideration in the review and approval of all discretionary projects.	**Consistent.** The Project's air quality impacts are analyzed in this document, and as discussed herein, all impacts with respect to air quality would be less than significant.
Policy 4.2.5. Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	**Consistent.** The proposed project would support use of alternative transportation modes. The Project Site is well-served by public transit, including Metro Lines 4 and 60 on Sunset Boulevard, Lines 10/48 and 92 on Edgeware Road, Line 55 on Figueroa Street, as well as LADOT DASH (Lincoln Heights) circulator shuttle service on Cesar Chavez Avenue. Metro's Grand Avenue Arts/Bunker Hill rail station is 4,500 feet south of the Project Site, where the A (Blue) and B (Red) Lines provide rail access to the region. On-site bicycle parking for residents and workers can support bicycle transport in lieu of driving and two Metro bikeshare stations provide other options for active transportation. In addition, the live/work units will help reduce travel demand.
Policy 4.3.1. Revise the City's General Plan/Community Plans to ensure that new or relocated sensitive receptors are located to minimize significant health risks posed by air pollution sources.	**Not Applicable.** This policy calls for City updates to its General Plan. The Project would not inhibit the implementation of this policy.
Policy 4.3.2. Revise the City's General Plan/Community Plans to ensure that new or relocated major air pollution sources are located to minimize significant health risks to sensitive receptors.	**Not Applicable.** This policy calls for City updates to its General Plan. The Project would not inhibit the implementation of this policy.
Policy 5.1.1. Make improvements in Harbor and airport operations and facilities in order to reduce air emissions.	**Not Applicable.** This policy calls for cleaner operations of the City's water port and airport facilities. The Project would not inhibit the implementation of this policy.
Policy 5.1.2. Effect a reduction in energy consumption and shift to non-polluting sources of energy in its buildings and operations.	**Not Applicable.** This policy calls for cleaner operations of the City's buildings and operations. The Project would not inhibit the implementation of this policy.

Table 4
Project Consistency with City of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
Policy 5.1.3. Have the Department of Water and Power make improvements at its in-basin power plants in order to reduce air emissions.	**Not Applicable.** This policy calls for cleaner operations of the City's Water and Power energy plants. The Project would not inhibit the implementation of this policy.
Policy 5.1.4. Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.	**Consistent.** The Project would be consistent with this policy by complying with Title 24, CALGreen, and other requirements to reduce solid waste and energy consumption. This includes the City's March 2010 ordinance (Council File 09-3029) that requires all mixed construction and demolition waste be taken to City-certified waste processors.
Policy 5.2.1. Reduce emissions from its own vehicles by continuing scheduled maintenance, inspection and vehicle replacement programs; by adhering to the State of California's emissions testing and monitoring programs; by using alternative fuel vehicles wherever feasible, in accordance with regulatory agencies and City Council policies.	**Not Applicable.** This policy calls for the City to gradually reduce the fleet emissions inventory from its vehicles through use of alternative fuels, improved maintenance practices, and related operational improvements. The Project's support of electric vehicles will continue the State's conversion to zero emission fleets that do not required engine inspections
Policy 5.3.1. Support the development and use of equipment powered by electric or low-emitting fuels.	**Consistent.** The Project would be designed to meet the applicable requirements of the States Green Building Standards Code and the City of Los Angeles' Green Building Code, both of which promote a shift from natural gas use toward electrification of buildings. The Project would also include 26 electric vehicle charging stations and 66 more spaces with conduits and supplies for future charging stations.
Policy 6.1.1. Raise awareness through public-information and education programs of the actions that individuals can take to reduce air emissions.	**Not Applicable.** This policy calls for the City to promote clean air awareness through its public awareness programs. The Project would not inhibit the implementation of this policy.
Source: DKA Planning, 2023.	

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

Less Than Significant Impact.

Construction

A cumulatively considerable net increase would occur if the project's construction impacts substantially contribute to air quality violations when considering other projects that may undertake construction activities at the same time. Individual projects that generate emissions that do not exceed SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. SCAQMD

neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to assess the impacts associated with these emissions.[36]

Construction-related emissions were estimated using the SCAQMD's CalEEMod 2022.1.1.17 model and a projected construction schedule of at least 30 months. Table 5 summarizes the estimated construction schedule that was modeled for air quality impacts.

Table 5
Construction Schedule Assumptions

Phase	Duration	Notes
Demolition	Month 1 (one week)	Removal of 6,000 square feet of asphalt/concrete surfaces and 1,344 square feet of billboards hauled 20 miles to landfill in 10-cubic yard capacity trucks.
Site Preparation	Month 1 (two weeks)	Removal of 16,000 square feet of vegetation.
Grading	Months 1-4	Approximately 40,000 cubic yards of soil (including 25 percent swell factor)[37] hauled 20 miles to landfill in 10-cubic yard capacity trucks.
Trenching	Month 5	Trenching for utilities, including gas, water, electricity, and telecommunications.
Building Construction	Months 6-29	Footings and foundation work, framing, welding; installing mechanical, electrical, and plumbing. Floor assembly, cabinetry and carpentry, elevator installations, low voltage systems, trash management.
Architectural Coatings	Months 28-30	Application of interior and exterior coatings and sealants.
Source: Estimates provided by the Applicant, May 2023.		

The Project would be required to comply with the following regulations, as applicable:

- SCAQMD Rule 403, would reduce the amount of particulate matter entrained in ambient air as a result of anthropogenic fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

- SCAQMD Rule 1113, which limits the VOC content of architectural coatings.

[36] South Coast Air Quality Management District, 2003 White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution: "As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR…Projects that exceed the project-specific significance threshold are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are not considered to be cumulatively significant.

[37] City of Los Angeles, Environmental Assessment Form

- SCAQMD Rule 402, which states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

- In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (with gross vehicle weight over 10,000 pounds) during construction would be limited to five minutes at any location.

- In accordance with Section 93115 in Title 17 of the California Code of Regulations, operation of any stationary, diesel-fueled, compression-ignition engines would meet specific fuel and fuel additive requirements and emissions standards.

Project Design Feature

The Project would implement the following project design feature to further minimize construction-related emissions:

PDF AIR-1: Construction equipment operating at the Project Site shall be subject to the requirements listed below.

- Prior to the issuance of a grading or building permit for each phase, an inventory of off-road heavy-duty construction equipment for that phase of construction, equal to or greater than 50 horsepower that will be used an aggregate of 40 or more hours, shall be provided to the Department of Building and Safety and the Department of City Planning. The inventory shall include the horsepower rating, engine production year, and certification of the specified Tier standard. A copy of each unit's certified tier specification or model year specification and California Air Resources Board or South Coast Air Quality Management District operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment.

- Off-road diesel-powered equipment within the construction inventory shall meet the Tier 4 final off-road emissions standards within the Los Angeles region. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board certified Level 3 Diesel Particulate Filter or equivalent.

Regional Emissions

Construction activity creates air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers traveling to and from the Project Site. NO_X emissions would primarily result from the use of construction equipment and truck trips.

Fugitive dust emissions would peak during grading activities, where approximately 40,000 cubic yards of soil (including a 25 percent swell factor as recommended by the City of Los Angeles) would be exported from the Project Site. All construction projects in the Basin must comply with SCAQMD Rule 403 for fugitive dust. Rule 403 control requirements include measures to prevent the generation of visible dust plumes. Measures include, but are not limited to, applying water and/or soil binders to uncovered

areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system or other control measures to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project Site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce regional $PM_{2.5}$ and PM_{10} emissions associated with construction activities by approximately 61 percent.

During the building finishing phase, the application of architectural coatings (e.g., paints) would release VOCs (regulated by SCAQMD Rule 1113). The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

As shown in Table 6, construction of the Project would produce VOC, NO_X, CO, SO_X, PM_{10} and $PM_{2.5}$ emissions that do not exceed the SCAQMD's regional thresholds. As a result, construction of the Project would not contribute substantially to an existing violation of air quality standards for regional pollutants (e.g., ozone). This impact is considered less than significant.

Note, however, that the CalEEMod results omit the implementation of project design feature PDF AIR-1, which would further reduce construction-period emissions, for purposes of conservative analysis.

Localized Emissions

In addition to maximum daily regional emissions, maximum localized (on-site) emissions were quantified for each construction activity. The localized construction air quality analysis was conducted using the methodology promulgated by the SCAQMD. Look-up tables provided by the SCAQMD were used to determine localized construction emissions thresholds for the Project.[38] LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are based on the most recent background ambient air quality monitoring data (2019-2021) for the Project area.

Table 6
Daily Construction Emissions

Construction Phase Year	Daily Emissions (Pounds Per Day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2024	0.2	2.1	1.9	<0.1	0.7	0.2
2025	5.9	42.5	68.3	0.1	5.8	2.5
2026	5.5	40.9	66.5	0.1	5.6	2.3
2027	38.0	48.8	78.9	0.1	6.5	2.7
Maximum Regional Total	38.0	48.8	78.9	0.1	6.5	2.7
Regional Threshold	75	100	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Maximum Localized Total	36.7	45.8	57.6	0.1	1.6	1.5

[38] South Coast Air Quality Management District, LST Methodology Appendix C-Mass Rate LST Look-up Table, revised October 2009.

Table 6
Daily Construction Emissions

Localized Threshold	N/A	108	1,048	N/A	8	5
Exceed Threshold?	**N/A**	**No**	**No**	**N/A**	**No**	**No**

The construction dates are used for the modeling of air quality emissions in the CalEEMod software. If construction activities commence later than what is assumed in the environmental analysis, the actual emissions would be lower than analyzed because of the increasing penetration of newer equipment with lower certified emission levels. Assumes implementation of SCAQMD Rule 403 (Fugitive Dust Emissions), but omits PDF AIR-1 for purposes of conservative analysis.

Source: DKA Planning, 2023 based on CalEEMod 2022.1.1.17 model runs. LST analyses based on two-acre site with 25-meter distances to receptors in Central LA source receptor area. Estimates reflect the peak summer or winter season, whichever is higher. Totals may not add up due to rounding. Modeling sheets included in the Technical Appendix.

Maximum on-site daily construction emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for the Central Los Angeles SRA based on construction site acreage that is less than or equal to two acres. While the Project Site is 2.459 acres, the use of an SCAQMD threshold for a smaller site ensures a more conservative threshold of significance that is protective of public health. Potential impacts were evaluated at the closest off-site sensitive receptor, which are the residences to the east of the Project Site on Everett Street. The closest receptor distance on the SCAQMD mass rate LST look-up tables is 25 meters.

As shown in Table 6, above**,** the Project would produce emissions that do not exceed the SCAQMD's recommended localized standards of significance for NO_2 and CO during the construction phase. Similarly, construction activities would not produce PM_{10} and $PM_{2.5}$ emissions that exceed localized thresholds recommended by the SCAQMD. These estimates assume the use of Best Available Control Measures (BACMs) that address fugitive dust emissions of PM_{10} and $PM_{2.5}$ through SCAQMD Rule 403. This would include watering portions of the site that are disturbed during grading activities and minimizing tracking of dirt onto local streets. Therefore, construction impacts on localized air quality are considered less than significant.

Operation

Operational emissions of criteria pollutants would come from area, energy, and mobile sources. Area sources include consumer products such as household cleaners, architectural coatings for routine maintenance, and landscaping equipment. Energy sources include electricity and natural gas use for space cooling and heating and water heating.[39] The CalEEMod program generates estimates of emissions from energy use based on the land use type and size. The Project would also produce long-term air quality impacts to the region primarily from motor vehicles that access the Project Site. The Project could add up to 1,850 vehicle trips to the local roadway network on a weekday at the start of operations in 2027 that would generate 11,632 daily vehicle miles traveled (VMT).[40]

[39] When electricity is used in buildings or local developments, electricity generation typically takes place offsite at power plants.

[40] Fehr & Peers, Draft Transportation Assessment – Sunset + Everett Project; October 2023. Estimates from City of Los Angeles VMT Calculator, version 1.3.

As shown in Table 7, the Project's emissions would not exceed the SCAQMD's regional or localized significance thresholds. Therefore, the operational impacts of the Project on regional and localized air quality are considered less than significant.

Table 7
Daily Operations Emissions

Emissions Source	Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	9.9	0.2	23.6	<0.1	<0.1	<0.1
Energy Sources	0.1	1.1	0.6	<0.1	0.1	0.1
Mobile Sources	5.7	3.8	43.7	0.1	9.7	2.5
Regional Total	15.7	5.1	67.8	0.1	9.8	2.6
Regional Significance Threshold	55	55	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Localized Total	9.9	1.3	24.2	<0.1	0.1	0.1
Localized Significance Threshold	N/A	108	1,048	N/A	2	2
Exceed Threshold?	**N/A**	**No**	**No**	**N/A**	**No**	**No**
LST analyses based on two-acre site with 25-meter distances to receptors in Central Los Angeles SRA Source: DKA Planning, 2023 based on CalEEMod 2022.1.1.17 model runs (included in the Technical Appendix). Totals reflect the summer season maximum and may not add up due to rounding.						

c. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. There are several sensitive receptors within 0.25 miles of the Project Site that could be exposed to air pollution from construction and operation of the Project, including, but are not limited to, the following representative sampling:

- Residences, Everett Street (west side); as close as five feet east of the Project Site.
- Residential structures[41], 1251-1255 Sunset Boulevard, five feet north of the Project Site.
- Residences, Everett Street (east side); 60 feet east of the Project Site.
- Residences, Sunset Boulevard (west side); as close as 100 feet west of the Project Site.
- Residences, 1190 Sunset Boulevard; 110 feet west of the Project Site.
- Residences, 1271 Sunset Boulevard; 200 feet north of the Project Site.
- Everett Park, 250 feet east of the Project Site.
- Preschool, 707 Kensington Road; about 500 feet west of the Project Site.

Construction

Construction of the Project could expose sensitive receptors to substantial pollutant concentrations if maximum daily emissions of regulated pollutants generated by sources located on and/or near the Project Site exceeded the applicable LST values presented in Table 3, or if construction activities generated significant emissions of TACs that could result in carcinogenic risks or non-carcinogenic hazards exceeding

41 Note these structures are abandoned and have been since at least early 2021. However, for conservative analysis, we assume these could be sensitive receptors that could be re-occupied.

the SCAQMD Air Quality Significance Thresholds of 10 excess cancers per million or non-carcinogenic Hazard Index greater than 1.0, respectively. As discussed above, the LST values were derived by the SCAQMD for the criteria pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$ to prevent the occurrence of concentrations exceeding the air quality standards at sensitive receptor locations based on proximity and construction site size.

As shown in Table 6, during construction of the Project, maximum daily localized unmitigated emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ from sources on the Project Site would remain below each of the respective LST values. Unmitigated maximum daily localized emissions would not exceed any of the localized standards for receptors that are within 25 meters of the Project's construction activities. Therefore, based on SCAQMD guidance, localized emissions of criteria pollutants would not have the potential to expose sensitive receptors to substantial concentrations that would present a public health concern.

The primary TAC that would be generated by construction activities is diesel PM, which would be released from the exhaust stacks of construction equipment. The construction emissions modeling conservatively assumed that all equipment present on the Project Site would be operating simultaneously throughout most of the day, while in all likelihood this would rarely be the case. Average daily emissions of diesel PM would be less than one pound per day throughout the course of Project construction. Therefore, the magnitude of daily diesel PM emissions, would not be sufficient to result in substantial pollutant concentrations at off-site locations nearby.

Furthermore, according to SCAQMD methodology, health risks from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 30-year period will contract cancer based on the use of standard risk-assessment methodology. The entire duration of construction activities associated with implementation of the Project is anticipated to be approximately 30 months, and the magnitude of daily diesel PM emissions will vary over this time period. No residual emissions and corresponding individual cancer risk are anticipated after construction. Because there is such a short-term exposure period, construction TAC emissions would result in a less than significant impact. Therefore, construction of the Project would not expose sensitive receptors to substantial diesel PM concentrations, and this impact would be less than significant.

Operation

The Project Site would be developed with multi-family residences and commercial uses (i.e., restaurants), land uses that are not typically associated with TAC emissions. Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes (e.g., chrome plating, electrical manufacturing, petroleum refinery). The Project would not include these types of potential industrial manufacturing process sources. It is expected that quantities of hazardous TACs generated on-site (e.g., cleaning solvents, paints, landscape pesticides) for the types of proposed land uses would be below thresholds warranting further study under California Accidental Release Program.

When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs. CARB has published and adopted the Air Quality and Land Use Handbook: A Community Health Perspective, which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities).[42] The SCAQMD adopted similar recommendations in its Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.[43] Together, the CARB and SCAQMD guidelines recommend siting distances for both the development of sensitive land uses in proximity to TAC sources and the addition of new TAC sources in proximity to existing sensitive land uses.

The primary sources of potential air toxics associated with Project operations include DPM from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets) and to a lesser extent, facility operations (e.g., natural gas fired boilers). However, these activities, and the land uses associated with the Project, are not considered land uses that generate substantial TAC emissions. It should be noted that the SCAQMD recommends that health risk assessments (HRAs) be conducted for substantial individual sources of DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.[44] Based on this guidance, the Project would not include these types of land uses and is not considered to be a substantial source of DPM warranting a refined HRA since daily truck trips to the Project Site would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. In addition, the CARB-mandated airborne toxic control measures (ATCM) limits diesel-fueled commercial vehicles (delivery trucks) to idle for no more than five minutes at any given time, which would further limit diesel particulate emissions.

As the Project would not contain substantial TAC sources and is consistent with the CARB and SCAQMD guidelines, the Project would not result in the exposure of off-site sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0, and potential TAC impacts would be less than significant.

The Project would generate long-term emissions on-site from area and energy sources that would generate negligible pollutant concentrations of CO, NO_2, $PM_{2.5}$, or PM_{10} at nearby sensitive receptors. While long-term operations of the Project would add traffic to local roads that produces off-site emissions, these would not result in exceedances of CO air quality standards at roadways in the area due to three key factors. First, CO hotspots are extremely rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to this Project area. Second, auto-related emissions of CO continue to decline because of advances in fuel combustion technology in the vehicle fleet. Finally, the Project would not contribute to the levels of congestion that would be needed to produce emissions concentrations needed to trigger a CO hotspot, as it would add 1,850 vehicle trips to the local roadway network on weekdays when the development could be leased

42 California Air Resources Board, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.

43 South Coast Air Quality Management District, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

44 South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, 2002.

and operational in 2027.[45] The majority of vehicle-related impacts at the Project Site would come from up to 152 and 137 vehicles entering and exiting the development during the peak A.M. and P.M. hours, respectively.[46] This would represent 4.7 and 4.4 percent of the 3,250 and 3,122 vehicles currently using Sunset Boulevard at Beaudry Avenue in the A.M. and P.M. peak hours, respectively.[47] Assuming peak A.M. hour volumes represent ten percent of daily volumes, this intersection would carry 26,400 daily vehicle trips, well below the traffic volumes that would be needed to generate CO exceedances of the ambient air quality standard.[48]

Finally, the Project would not result in any substantial emissions of TACs during the construction or operations phase. During the construction phase, the primary air quality impacts would be associated with the combustion of diesel fuels, which produce exhaust-related particulate matter that is considered a toxic air contaminant by CARB based on chronic exposure to these emissions.[49] However, construction activities would not produce chronic, long-term exposure to diesel particulate matter. During long-term project operations, the Project does not include typical sources of acutely and chronically hazardous TACs such as industrial manufacturing processes and automotive repair facilities. As a result, the Project would not create substantial concentrations of TACs.

In addition, the SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulate emissions (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[50] The Project would not generate a substantial number of truck trips. Based on the limited activity of TAC sources, the Project would not warrant the need for a health risk assessment associated with on-site activities. Therefore, the Project's operational impacts on local sensitive receptors would be less than significant.

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

Less Than Significant Impact. The Project would not result in activities that create objectionable odors. The Project is a housing development with commercial uses such as restaurants that would not include any activities typically associated with unpleasant odors and local nuisances (e.g., rendering facilities, dry cleaners). SCAQMD regulations that govern nuisances (i.e., Rule 402, Nuisances) would regulate any occasional odors associated with residences and on-site restaurants and other commercial uses. As a result, any odor impacts from the Project would be considered less than significant.

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45 Fehr & Peers, Draft Transportation Assessment – Sunset + Everett Project; October 2023. Daily trip and VMT estimates from City of Los Angeles VMT Calculator, version 1.3.

46 Fehr & Peers, Draft Transportation Assessment – Sunset + Everett Project; October 2023.

47 Ibid.

48 South Coast Air Quality Management District; 2003 AQMP. As discussed in the 2003 AQMP, the 1992 CO Plan included a CO hotspot analysis at four intersections in the peak A.M. and P.M. time periods, including Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection was Wilshire and Veteran, used by 100,000 vehicles per day. The 2003 AQMP estimated a 4.6 ppm one-hour concentration at this intersection, which meant that an exceedance (20 ppm) would not occur until daily traffic exceeded more than 400,000 vehicles per day.

49 California Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust. www.http://oehha.ca.gov/public_info/facts/dieselfacts.html

50 South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.

Cumulative Impacts

According to SCAQMD, individual projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As discussed above, the Project's construction-related and operational air quality emissions would be less than significant. Therefore, the Project's contribution to cumulative air quality impacts due to air emissions would not be cumulatively considerable and, therefore, would be less than significant.

Similar to the Project, the greatest potential for TAC emissions at each Related Project would generally involve diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Construction activities are temporary and short-term events, thus construction activities at each Related Project would not result in a long-term substantial source of TAC emissions. Additionally, SCAQMD's CEQA Air Quality Handbook and SCAQMD's supplemental online guidance/information do not require an HRA for short-term construction emissions. It is, therefore, not required or meaningful to evaluate long-term cancer impacts from construction activities which occur over relatively short durations. As such, given the short-term nature of these activities, cumulative TAC emission impacts during construction would be less than significant.

With respect to TAC emissions, neither the Project nor any of Related Projects (which are largely residential, retail/commercial, and institutional), would represent a substantial source of TAC emissions, which are typically associated with large-scale industrial, manufacturing, and transportation hub facilities. However, the Project and Related Projects would be subject to SCAQMD permitting and best available control technology (BACT) requirements to limit pollutant emissions. The Project and Related Projects would be consistent with the recommended screening level siting distances for TAC sources, as set forth in CARB's Land Use Guidelines, and the Project and Related Projects would not result in a cumulative impact requiring further evaluation. However, the Related Projects could generate minimal TAC emissions related to the use of consumer products and landscape maintenance activities, among other things. Pursuant to AB 1807, which directs CARB to identify substances as TACs and adopt airborne toxic control measures to control such substances, SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial Basin-wide TAC emissions reductions. As such, cumulative TAC emissions during long-term operations would be less than significant. In addition, as discussed above, the Project would not result in any substantial sources of TACs that have been identified by the CARB's Land Use Guidelines and thus, would not contribute to a cumulative impact.

In conclusion, during construction and operation, the Project's regional, localized, and TAC emissions would not be cumulatively considerable, and cumulative impacts would be less than significant.

TECHNICAL APPENDIX

DouglasKim+Associates,LLC

FUTURE EMISSIONS

Sunset Everett (Future) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sunset Everett (Future)
Construction Start Date	12/24/2024
Operational Year	2027
Lead Agency	City of Los Angeles
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	16.8
Location	1185 W Sunset Blvd, Los Angeles, CA 90026, USA
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4029
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.17

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	327	Dwelling Unit	2.30	311,838	37,095	—	773	—
High Turnover (Sit Down Restaurant)	9.46	1000sqft	0.16	9,462	0.00	—	—	—
Enclosed Parking with Elevator	263	Space	0.00	105,200	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	38.0	48.8	78.9	0.12	1.62	4.91	6.52	1.49	1.17	2.66
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	5.85	42.5	65.3	0.09	1.60	4.17	5.77	1.46	1.00	2.46
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	7.37	29.3	46.1	0.06	1.03	2.94	3.97	0.94	0.70	1.64
Annual (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	1.34	5.34	8.42	0.01	0.19	0.54	0.73	0.17	0.13	0.30

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—
2025	5.86	42.3	68.3	0.09	1.60	4.17	5.77	1.46	1.00	2.46
2026	5.46	40.7	66.5	0.09	1.44	4.17	5.61	1.32	1.00	2.31
2027	38.0	48.8	78.9	0.12	1.62	4.91	6.52	1.49	1.17	2.66
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—
2024	0.20	2.10	1.87	0.01	0.05	0.66	0.71	0.05	0.12	0.17
2025	5.85	42.5	65.3	0.09	1.60	4.17	5.77	1.46	1.00	2.46
2026	5.45	40.9	63.9	0.09	1.44	4.17	5.61	1.32	1.00	2.31
2027	5.18	39.3	62.5	0.09	1.26	4.17	5.42	1.16	1.00	2.15
Average Daily	—	—	—	—	—	—	—	—	—	—
2024	< 0.005	0.03	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
2025	2.85	22.5	32.4	0.05	0.83	2.18	3.01	0.76	0.52	1.28
2026	3.89	29.3	46.1	0.06	1.03	2.94	3.97	0.94	0.70	1.64
2027	7.37	13.4	21.1	0.03	0.44	1.35	1.78	0.40	0.32	0.72
Annual	—	—	—	—	—	—	—	—	—	—
2024	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2025	0.52	4.10	5.91	0.01	0.15	0.40	0.55	0.14	0.09	0.23
2026	0.71	5.34	8.42	0.01	0.19	0.54	0.73	0.17	0.13	0.30
2027	1.34	2.44	3.84	0.01	0.08	0.25	0.33	0.07	0.06	0.13

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—
2025	5.86	42.3	68.3	0.09	1.60	4.17	5.77	1.46	1.00	2.46
2026	5.46	40.7	66.5	0.09	1.44	4.17	5.61	1.32	1.00	2.31
2027	38.0	48.8	78.9	0.12	1.62	4.91	6.52	1.49	1.17	2.66
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—
2024	0.20	2.10	1.87	0.01	0.05	0.66	0.71	0.05	0.12	0.17
2025	5.85	42.5	65.3	0.09	1.60	4.17	5.77	1.46	1.00	2.46
2026	5.45	40.9	63.9	0.09	1.44	4.17	5.61	1.32	1.00	2.31
2027	5.18	39.3	62.5	0.09	1.26	4.17	5.42	1.16	1.00	2.15
Average Daily	—	—	—	—	—	—	—	—	—	—
2024	< 0.005	0.03	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
2025	2.85	22.5	32.4	0.05	0.83	2.18	3.01	0.76	0.52	1.28
2026	3.89	29.3	46.1	0.06	1.03	2.94	3.97	0.94	0.70	1.64
2027	7.37	13.4	21.1	0.03	0.44	1.35	1.78	0.40	0.32	0.72
Annual	—	—	—	—	—	—	—	—	—	—
2024	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2025	0.52	4.10	5.91	0.01	0.15	0.40	0.55	0.14	0.09	0.23
2026	0.71	5.34	8.42	0.01	0.19	0.54	0.73	0.17	0.13	0.30
2027	1.34	2.44	3.84	0.01	0.08	0.25	0.33	0.07	0.06	0.13

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	67.8	—	—	—	—	—	—	—

Mit.	—	—	67.5	—	—	—	—	—	—	—
% Reduced	—	—	1%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	41.3	—	—	—	—	—	—	—
Mit.	—	—	40.9	—	—	—	—	—	—	—
% Reduced	—	—	1%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	54.8	—	—	—	—	—	—	—
Mit.	—	—	54.4	—	—	—	—	—	—	—
% Reduced	—	—	1%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	10.0	—	—	—	—	—	—	—
Mit.	—	—	9.94	—	—	—	—	—	—	—
% Reduced	—	—	1%	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	5.65	3.79	43.7	0.10	0.06	9.64	9.71	0.06	2.45	2.51
Area	9.88	0.22	23.6	< 0.005	0.02	—	0.02	0.01	—	0.01
Energy	0.06	1.06	0.55	0.01	0.08	—	0.08	0.08	—	0.08
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—

Vegetation	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Total	NaN	NaN	67.8	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	5.58	4.14	40.7	0.10	0.06	9.64	9.71	0.06	2.45	2.51
Area	7.43	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Energy	0.06	1.06	0.55	0.01	0.08	—	0.08	0.08	—	0.08
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Total	NaN	NaN	41.3	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Average Daily	—	—	—	—	—	—	—	—	—	—
Mobile	5.35	3.84	38.1	0.09	0.06	8.48	8.54	0.05	2.15	2.21
Area	9.11	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01
Energy	0.06	1.06	0.55	0.01	0.08	—	0.08	0.08	—	0.08
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Total	NaN	NaN	54.8	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Annual	—	—	—	—	—	—	—	—	—	—
Mobile	0.98	0.70	6.96	0.02	0.01	1.55	1.56	0.01	0.39	0.40
Area	1.66	0.03	2.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	0.01	0.19	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—

Vegetation	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Total	NaN	NaN	10.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

2.6. Operations Emissions by Sector, Mitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	5.65	3.79	43.7	0.10	0.06	9.64	9.71	0.06	2.45	2.51
Area	9.88	0.22	23.6	< 0.005	0.02	—	0.02	0.01	—	0.01
Energy	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Total	NaN	NaN	67.5	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	5.58	4.14	40.7	0.10	0.06	9.64	9.71	0.06	2.45	2.51
Area	7.43	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Energy	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Total	NaN	NaN	40.9	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Average Daily	—	—	—	—	—	—	—	—	—	—
Mobile	5.35	3.84	38.1	0.09	0.06	8.48	8.54	0.05	2.15	2.21

Area	9.11	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01
Energy	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Total	NaN	NaN	54.4	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Annual	—	—	—	—	—	—	—	—	—	—
Mobile	0.98	0.70	6.96	0.02	0.01	1.55	1.56	0.01	0.39	0.40
Area	1.66	0.03	2.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Vegetation	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Total	NaN	NaN	9.94	NaN	NaN	NaN	NaN	NaN	NaN	NaN

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.16	1.31	1.27	< 0.005	0.05	—	0.05	0.04	—	0.04
Demolition	—	—	—	—	—	0.44	0.44	—	0.07	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Demolition	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.32	0.00	0.00	0.07	0.07	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.76	0.28	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.2. Demolition (2024) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.31	1.27	< 0.005	0.05	—	0.05	0.04	—	0.04
Demolition	—	—	—	—	—	0.44	0.44	—	0.07	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Demolition	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.32	0.00	0.00	0.07	0.07	0.00	0.02	0.02

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.76	0.28	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.3. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43
Dust From Material Movement	—	—	—	—	—	0.62	0.62	—	0.07	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.33	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01

Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	5.96	2.25	0.03	0.06	1.25	1.31	0.06	0.34	0.40
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005

3.4. Site Preparation (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43
Dust From Material Movement	—	—	—	—	—	0.62	0.62	—	0.07	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.33	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	5.96	2.25	0.03	0.06	1.25	1.31	0.06	0.34	0.40
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005

3.5. Grading (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52	13.1	16.5	0.02	0.60	—	0.60	0.56	—	0.56
Dust From Material Movement	—	—	—	—	—	0.41	0.41	—	0.04	0.04
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52	13.1	16.5	0.02	0.60	—	0.60	0.56	—	0.56
Dust From Material Movement	—	—	—	—	—	0.41	0.41	—	0.04	0.04

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	2.70	3.40	0.01	0.12	—	0.12	0.11	—	0.11
Dust From Material Movement	—	—	—	—	—	0.09	0.09	—	0.01	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.49	0.62	< 0.005	0.02	—	0.02	0.02	—	0.02
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	1.39	0.00	0.00	0.26	0.26	0.00	0.06	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	5.67	2.20	0.03	0.06	1.24	1.29	0.06	0.34	0.40
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.18	0.00	0.00	0.26	0.26	0.00	0.06	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	5.89	2.23	0.03	0.06	1.24	1.29	0.06	0.34	0.40
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	1.22	0.46	0.01	0.01	0.25	0.26	0.01	0.07	0.08

Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.22	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01

3.6. Grading (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52	13.1	16.5	0.02	0.60	—	0.60	0.56	—	0.56
Dust From Material Movement	—	—	—	—	—	0.41	0.41	—	0.04	0.04
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52	13.1	16.5	0.02	0.60	—	0.60	0.56	—	0.56
Dust From Material Movement	—	—	—	—	—	0.41	0.41	—	0.04	0.04
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	2.70	3.40	0.01	0.12	—	0.12	0.11	—	0.11
Dust From Material Movement	—	—	—	—	—	0.09	0.09	—	0.01	0.01

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.49	0.62	< 0.005	0.02	—	0.02	0.02	—	0.02
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	1.39	0.00	0.00	0.26	0.26	0.00	0.06	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	5.67	2.20	0.03	0.06	1.24	1.29	0.06	0.34	0.40
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.18	0.00	0.00	0.26	0.26	0.00	0.06	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	5.89	2.23	0.03	0.06	1.24	1.29	0.06	0.34	0.40
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	1.22	0.46	0.01	0.01	0.25	0.26	0.01	0.07	0.08
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.22	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01

3.7. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.59	39.2	47.6	0.08	1.58	—	1.58	1.45	—	1.45
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.59	39.2	47.6	0.08	1.58	—	1.58	1.45	—	1.45
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	16.4	19.9	0.03	0.66	—	0.66	0.61	—	0.61
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	2.99	3.64	0.01	0.12	—	0.12	0.11	—	0.11
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.22	1.23	19.7	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.94	0.95	0.01	0.02	0.46	0.48	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.20	1.36	16.7	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	2.02	0.96	0.01	0.02	0.46	0.48	0.01	0.13	0.14

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.62	7.36	0.00	0.00	1.54	1.54	0.00	0.36	0.36
Vendor	0.02	0.85	0.40	0.01	0.01	0.19	0.20	0.01	0.05	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.34	0.00	0.00	0.28	0.28	0.00	0.07	0.07
Vendor	< 0.005	0.16	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.59	39.2	47.6	0.08	1.58	—	1.58	1.45	—	1.45
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.59	39.2	47.6	0.08	1.58	—	1.58	1.45	—	1.45
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	16.4	19.9	0.03	0.66	—	0.66	0.61	—	0.61
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.35	2.99	3.64	0.01	0.12	—	0.12	0.11	—	0.11
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.22	1.23	19.7	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.94	0.95	0.01	0.02	0.46	0.48	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.20	1.36	16.7	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	2.02	0.96	0.01	0.02	0.46	0.48	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.62	7.36	0.00	0.00	1.54	1.54	0.00	0.36	0.36
Vendor	0.02	0.85	0.40	0.01	0.01	0.19	0.20	0.01	0.05	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.34	0.00	0.00	0.28	0.28	0.00	0.07	0.07
Vendor	< 0.005	0.16	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.36	37.7	47.3	0.08	1.42	—	1.42	1.30	—	1.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.36	37.7	47.3	0.08	1.42	—	1.42	1.30	—	1.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	26.9	33.8	0.05	1.01	—	1.01	0.93	—	0.93
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	4.92	6.17	0.01	0.18	—	0.18	0.17	—	0.17
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.04	1.10	18.3	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.85	0.89	0.01	0.02	0.46	0.48	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.04	1.23	15.6	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.93	0.92	0.01	0.02	0.46	0.48	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.96	11.7	0.00	0.00	2.62	2.62	0.00	0.61	0.61
Vendor	0.04	1.39	0.65	0.01	0.02	0.33	0.34	0.01	0.09	0.10

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.18	2.13	0.00	0.00	0.48	0.48	0.00	0.11	0.11
Vendor	0.01	0.25	0.12	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.36	37.7	47.3	0.08	1.42	—	1.42	1.30	—	1.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.36	37.7	47.3	0.08	1.42	—	1.42	1.30	—	1.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	26.9	33.8	0.05	1.01	—	1.01	0.93	—	0.93
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	4.92	6.17	0.01	0.18	—	0.18	0.17	—	0.17
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.04	1.10	18.3	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.85	0.89	0.01	0.02	0.46	0.48	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.04	1.23	15.6	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.93	0.92	0.01	0.02	0.46	0.48	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.96	11.7	0.00	0.00	2.62	2.62	0.00	0.61	0.61
Vendor	0.04	1.39	0.65	0.01	0.02	0.33	0.34	0.01	0.09	0.10
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.18	2.13	0.00	0.00	0.48	0.48	0.00	0.11	0.11
Vendor	0.01	0.25	0.12	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.15	36.2	47.2	0.08	1.24	—	1.24	1.14	—	1.14
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.15	36.2	47.2	0.08	1.24	—	1.24	1.14	—	1.14
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	10.7	13.9	0.02	0.37	—	0.37	0.34	—	0.34
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	1.95	2.54	< 0.005	0.07	—	0.07	0.06	—	0.06
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.01	0.98	17.0	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.77	0.84	0.01	0.01	0.46	0.47	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.99	1.22	14.4	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.84	0.86	0.01	0.01	0.46	0.47	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.36	4.48	0.00	0.00	1.08	1.08	0.00	0.25	0.25
Vendor	0.01	0.55	0.25	< 0.005	< 0.005	0.13	0.14	< 0.005	0.04	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.07	0.82	0.00	0.00	0.20	0.20	0.00	0.05	0.05

Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2027) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.15	36.2	47.2	0.08	1.24	—	1.24	1.14	—	1.14
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.15	36.2	47.2	0.08	1.24	—	1.24	1.14	—	1.14
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	10.7	13.9	0.02	0.37	—	0.37	0.34	—	0.34
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	1.95	2.54	< 0.005	0.07	—	0.07	0.06	—	0.06
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	1.01	0.98	17.0	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.77	0.84	0.01	0.01	0.46	0.47	0.01	0.13	0.14

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.99	1.22	14.4	0.00	0.00	3.71	3.71	0.00	0.87	0.87
Vendor	0.05	1.84	0.86	0.01	0.01	0.46	0.47	0.01	0.13	0.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.36	4.48	0.00	0.00	1.08	1.08	0.00	0.25	0.25
Vendor	0.01	0.55	0.25	< 0.005	< 0.005	0.13	0.14	< 0.005	0.04	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.07	0.82	0.00	0.00	0.20	0.20	0.00	0.05	0.05
Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	9.63	10.4	0.03	0.36	—	0.36	0.33	—	0.33
Architectural Coatings	31.4	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.21	1.72	1.85	0.01	0.06	—	0.06	0.06	—	0.06
Architectural Coatings	5.59	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.31	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01
Architectural Coatings	1.02	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.20	3.41	0.00	0.00	0.74	0.74	0.00	0.17	0.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.54	0.00	0.00	0.13	0.13	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2027) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	9.63	10.4	0.03	0.36	—	0.36	0.33	—	0.33
Architectural Coatings	31.4	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.72	1.85	0.01	0.06	—	0.06	0.06	—	0.06
Architectural Coatings	5.59	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.31	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01
Architectural Coatings	1.02	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.20	3.41	0.00	0.00	0.74	0.74	0.00	0.17	0.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.54	0.00	0.00	0.13	0.13	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Trenching (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.44	2.64	< 0.005	0.10	—	0.10	0.09	—	0.09
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Trenching (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.44	2.64	< 0.005	0.10	—	0.10	0.09	—	0.09
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	4.36	2.88	33.1	0.08	0.05	7.24	7.29	0.05	1.84	1.88
High Turnover (Sit Down Restaurant)	1.29	0.91	10.7	0.03	0.02	2.40	2.42	0.01	0.61	0.63
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.65	3.79	43.7	0.10	0.06	9.64	9.71	0.06	2.45	2.51
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	4.30	3.14	30.9	0.07	0.05	7.24	7.29	0.05	1.84	1.88
High Turnover (Sit Down Restaurant)	1.28	1.00	9.86	0.02	0.02	2.40	2.42	0.01	0.61	0.63
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.58	4.14	40.7	0.10	0.06	9.64	9.71	0.06	2.45	2.51
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.77	0.57	5.68	0.01	0.01	1.29	1.30	0.01	0.33	0.34
High Turnover (Sit Down Restaurant)	0.21	0.13	1.27	< 0.005	< 0.005	0.26	0.26	< 0.005	0.07	0.07

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.98	0.70	6.96	0.02	0.01	1.55	1.56	0.01	0.39	0.40

4.1.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	4.36	2.88	33.1	0.08	0.05	7.24	7.29	0.05	1.84	1.88
High Turnover (Sit Down Restaurant)	1.29	0.91	10.7	0.03	0.02	2.40	2.42	0.01	0.61	0.63
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.65	3.79	43.7	0.10	0.06	9.64	9.71	0.06	2.45	2.51
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	4.30	3.14	30.9	0.07	0.05	7.24	7.29	0.05	1.84	1.88
High Turnover (Sit Down Restaurant)	1.28	1.00	9.86	0.02	0.02	2.40	2.42	0.01	0.61	0.63
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.58	4.14	40.7	0.10	0.06	9.64	9.71	0.06	2.45	2.51
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.77	0.57	5.68	0.01	0.01	1.29	1.30	0.01	0.33	0.34

High Turnover (Sit Down Restaurant)	0.21	0.13	1.27	< 0.005	< 0.005	0.26	0.26	< 0.005	0.07	0.07
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.98	0.70	6.96	0.02	0.01	1.55	1.56	0.01	0.39	0.40

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.82	0.35	0.01	0.07	—	0.07	0.07	—	0.07
High Turnover (Sit Down Restaurant)	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.06	1.06	0.55	0.01	0.08	—	0.08	0.08	—	0.08

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.82	0.35	0.01	0.07	—	0.07	0.07	—	0.07
High Turnover (Sit Down Restaurant)	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.06	1.06	0.55	0.01	0.08	—	0.08	0.08	—	0.08
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	0.15	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01
High Turnover (Sit Down Restaurant)	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.01	0.19	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Consumer Products	6.88	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.56	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.45	0.22	23.6	< 0.005	0.02	—	0.02	0.01	—	0.01
Total	9.88	0.22	23.6	< 0.005	0.02	—	0.02	0.01	—	0.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Consumer Products	6.88	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.56	—	—	—	—	—	—	—	—	—
Total	7.43	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
Consumer Products	1.25	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.10	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.31	0.03	2.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	1.66	0.03	2.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.3.2. Mitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Consumer Products	6.88	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.56	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.45	0.22	23.6	< 0.005	0.02	—	0.02	0.01	—	0.01
Total	9.88	0.22	23.6	< 0.005	0.02	—	0.02	0.01	—	0.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Consumer Products	6.88	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.56	—	—	—	—	—	—	—	—	—
Total	7.43	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
Consumer Products	1.25	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.10	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.31	0.03	2.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	1.66	0.03	2.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.4.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.5.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	Infinity	—	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	NaN	-Infinity	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Sequestered	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	—	—	—	—	—	—	—	—	—
Orange Wattle	—	—	—	—	—	—	—	—	—	—
Marina Strawberry Tree	—	—	—	—	—	—	—	—	—	—
Oklahoma Texas Redbud	—	—	—	—	—	—	—	—	—	—
Australian Willow	—	—	—	—	—	—	—	—	—	—
Saratoga Hybrid Laurel	—	—	—	—	—	—	—	—	—	—
Olive	—	—	—	—	—	—	—	—	—	—

Catalina Cherry	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	Infinity	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	—	-Infinity	—	-Infinity	NaN	NaN	NaN	NaN	NaN	NaN
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Subtotal	—	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
—	—	—	—	—	—	—	—	—	—	—
Total	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	Infinity	—	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity

Oklahoma Texas Redbud	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	NaN	-Infinity	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Sequestered	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	—	—	—	—	—	—	—	—	—
Orange Wattle	—	—	—	—	—	—	—	—	—	—
Marina Strawberry Tree	—	—	—	—	—	—	—	—	—	—
Oklahoma Texas Redbud	—	—	—	—	—	—	—	—	—	—
Australian Willow	—	—	—	—	—	—	—	—	—	—
Saratoga Hybrid Laurel	—	—	—	—	—	—	—	—	—	—
Olive	—	—	—	—	—	—	—	—	—	—
Catalina Cherry	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	Infinity	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity

Orange Wattle	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	—	-Infinity	—	-Infinity	NaN	NaN	NaN	NaN	NaN	NaN
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Subtotal	—	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
—	—	—	—	—	—	—	—	—	—	—
Total	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Annual	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	Infinity	—	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN

Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	NaN	-Infinity	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Sequestered	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	—	—	—	—	—	—	—	—	—
Orange Wattle	—	—	—	—	—	—	—	—	—	—
Marina Strawberry Tree	—	—	—	—	—	—	—	—	—	—
Oklahoma Texas Redbud	—	—	—	—	—	—	—	—	—	—
Australian Willow	—	—	—	—	—	—	—	—	—	—
Saratoga Hybrid Laurel	—	—	—	—	—	—	—	—	—	—
Olive	—	—	—	—	—	—	—	—	—	—
Catalina Cherry	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	Infinity	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity

Catalina Cherry	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	—	-Infinity	—	-Infinity	NaN	NaN	NaN	NaN	NaN	NaN
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Subtotal	—	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
—	—	—	—	—	—	—	—	—	—	—
Total	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	Infinity	—	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	NaN	-Infinity	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Sequestered	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	—	—	—	—	—	—	—	—	—

Orange Wattle	—	—	—	—	—	—	—	—	—	—
Marina Strawberry Tree	—	—	—	—	—	—	—	—	—	—
Oklahoma Texas Redbud	—	—	—	—	—	—	—	—	—	—
Australian Willow	—	—	—	—	—	—	—	—	—	—
Saratoga Hybrid Laurel	—	—	—	—	—	—	—	—	—	—
Olive	—	—	—	—	—	—	—	—	—	—
Catalina Cherry	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	Infinity	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	—	-Infinity	—	-Infinity	NaN	NaN	NaN	NaN	NaN	NaN
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Subtotal	—	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
—	—	—	—	—	—	—	—	—	—	—

Total	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	Infinity	—	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	NaN	-Infinity	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Sequestered	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	—	—	—	—	—	—	—	—	—
Orange Wattle	—	—	—	—	—	—	—	—	—	—
Marina Strawberry Tree	—	—	—	—	—	—	—	—	—	—
Oklahoma Texas Redbud	—	—	—	—	—	—	—	—	—	—
Australian Willow	—	—	—	—	—	—	—	—	—	—
Saratoga Hybrid Laurel	—	—	—	—	—	—	—	—	—	—

Olive	—	—	—	—	—	—	—	—	—	—
Catalina Cherry	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	Infinity	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	—	-Infinity	—	-Infinity	NaN	NaN	NaN	NaN	NaN	NaN
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Subtotal	—	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
—	—	—	—	—	—	—	—	—	—	—
Total	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Annual	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	Infinity	—	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity
Orange Wattle	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity

Oklahoma Texas Redbud	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	-Infinity	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	NaN	-Infinity	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Sequestered	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	—	—	—	—	—	—	—	—	—
Orange Wattle	—	—	—	—	—	—	—	—	—	—
Marina Strawberry Tree	—	—	—	—	—	—	—	—	—	—
Oklahoma Texas Redbud	—	—	—	—	—	—	—	—	—	—
Australian Willow	—	—	—	—	—	—	—	—	—	—
Saratoga Hybrid Laurel	—	—	—	—	—	—	—	—	—	—
Olive	—	—	—	—	—	—	—	—	—	—
Catalina Cherry	—	—	—	—	—	—	—	—	—	—
Coast Live Oak	—	—	—	—	—	—	—	—	—	—
undefined	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Mexican Fan Palsm	—	Infinity	—	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity	Infinity

Orange Wattle	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Marina Strawberry Tree	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Oklahoma Texas Redbud	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Australian Willow	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Saratoga Hybrid Laurel	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Catalina Cherry	—	-Infinity	—	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity	-Infinity
Coast Live Oak	—	-Infinity	—	-Infinity	NaN	NaN	NaN	NaN	NaN	NaN
Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Fruitless Olive	—	—	—	—	NaN	NaN	NaN	NaN	NaN	NaN
Subtotal	—	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN
—	—	—	—	—	—	—	—	—	—	—
Total	NaN	NaN	—	NaN	NaN	NaN	NaN	NaN	NaN	NaN

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	12/24/2024	12/31/2024	5.00	6.00	—
Site Preparation	Site Preparation	1/1/2025	1/15/2025	5.00	11.0	—
Grading	Grading	1/16/2025	4/30/2025	5.00	75.0	—
Building Construction	Building Construction	6/1/2025	5/31/2027	5.00	521	—
Architectural Coating	Architectural Coating	4/1/2027	6/30/2027	5.00	65.0	—
Trenching	Trenching	5/1/2025	5/31/2025	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Demolition	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	2.00	8.00	148	0.41
Grading	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Grading	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Grading	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Grading	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Other Construction Equipment	Diesel	Average	1.00	8.00	82.0	0.42
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Building Construction	Air Compressors	Diesel	Average	4.00	8.00	37.0	0.48
Building Construction	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Building Construction	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73

Building Construction	Dumpers/Tenders	Diesel	Average	3.00	8.00	16.0	0.38
Building Construction	Other Construction Equipment	Diesel	Average	5.00	8.00	82.0	0.42
Building Construction	Other General Industrial Equipment	Diesel	Average	6.00	8.00	35.0	0.34
Building Construction	Other Material Handling Equipment	Diesel	Average	3.00	8.00	93.0	0.40
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating	Pressure Washers	Diesel	Average	1.00	8.00	14.0	0.30
Architectural Coating	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Architectural Coating	Surfacing Equipment	Diesel	Average	1.00	8.00	399	0.30
Architectural Coating	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Trenching	Dumpers/Tenders	Diesel	Average	1.00	8.00	14.0	0.30
Trenching	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Demolition	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	2.00	8.00	148	0.41
Grading	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Grading	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50

Grading	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Grading	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Other Construction Equipment	Diesel	Average	1.00	8.00	82.0	0.42
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Building Construction	Air Compressors	Diesel	Average	4.00	8.00	37.0	0.48
Building Construction	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Building Construction	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Building Construction	Dumpers/Tenders	Diesel	Average	3.00	8.00	16.0	0.38
Building Construction	Other Construction Equipment	Diesel	Average	5.00	8.00	82.0	0.42
Building Construction	Other General Industrial Equipment	Diesel	Average	6.00	8.00	35.0	0.34
Building Construction	Other Material Handling Equipment	Diesel	Average	3.00	8.00	93.0	0.40
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating	Pressure Washers	Diesel	Average	1.00	8.00	14.0	0.30
Architectural Coating	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Architectural Coating	Surfacing Equipment	Diesel	Average	1.00	8.00	399	0.30

Architectural Coating	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Trenching	Dumpers/Tenders	Diesel	Average	1.00	8.00	14.0	0.30
Trenching	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	5.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	8.33	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	67.5	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	66.7	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	284	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	53.7	10.2	HHDT,MHDT

Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	56.7	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	7.50	18.5	LDA,LDT1,LDT2
Trenching	Vendor	—	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	5.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	8.33	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	67.5	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2

Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	66.7	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	284	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	53.7	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	56.7	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	7.50	18.5	LDA,LDT1,LDT2
Trenching	Vendor	—	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	631,472	210,491	14,193	4,731	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	200	—
Site Preparation	—	5,936	16.5	0.00	—
Grading	—	40,000	75.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

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

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	690	0.05	0.01
2025	0.00	690	0.05	0.01
2026	0.00	690	0.05	0.01

2027	0.00	690	0.05	0.01

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	1,439	1,373	1,373	518,342	10,206	9,742	9,742	3,676,943
High Turnover (Sit Down Restaurant)	416	378	378	148,013	1,458	3,390	3,390	733,761
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	1,439	1,373	1,373	518,342	10,206	9,742	9,742	3,676,943
High Turnover (Sit Down Restaurant)	416	378	378	148,013	1,458	3,390	3,390	733,761
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	327
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	327
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
631471.95	210,491	14,193	4,731	—

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	1,073,702	690	0.0489	0.0069	3,245,592
High Turnover (Sit Down Restaurant)	308,178	690	0.0489	0.0069	896,332
Enclosed Parking with Elevator	388,339	690	0.0489	0.0069	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	1,075,143	690	0.0489	0.0069	0.00
High Turnover (Sit Down Restaurant)	308,178	690	0.0489	0.0069	896,332
Enclosed Parking with Elevator	388,339	690	0.0489	0.0069	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	12,188,533	635,851
High Turnover (Sit Down Restaurant)	2,872,036	0.00
Enclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	12,188,533	635,851
High Turnover (Sit Down Restaurant)	2,872,036	0.00
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	193	—
High Turnover (Sit Down Restaurant)	113	—
Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	193	—
High Turnover (Sit Down Restaurant)	113	—

Enclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Orange Wattle	8.00	17,003	85.0
Marina Strawberry Tree	14.0	27,228	133
Oklahoma Texas Redbud	15.0	21,429	96.0
Australian Willow	14.0	7,085	30.0
Saratoga Hybrid Laurel	15.0	21,252	106
Olive	1.00	5,193	24.0
Fruitless Olive	2.00	—	—
Catalina Cherry	12.0	25,490	127
Coast Live Oak	1.00	21,967	107
Mexican Fan Palsm	-9.00	5,779	22.0

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Orange Wattle	8.00	17,003	85.0
Marina Strawberry Tree	14.0	27,228	133
Oklahoma Texas Redbud	15.0	21,429	96.0
Australian Willow	14.0	7,085	30.0
Saratoga Hybrid Laurel	15.0	21,252	106
Olive	1.00	5,193	24.0
Fruitless Olive	2.00	—	—
Catalina Cherry	12.0	25,490	127
Coast Live Oak	1.00	21,967	107
Mexican Fan Palsm	-9.00	5,779	22.0

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.58	annual days of extreme heat
Extreme Precipitation	6.70	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	57.0
AQ-PM	90.4
AQ-DPM	90.9
Drinking Water	92.5
Lead Risk Housing	83.5
Pesticides	0.00
Toxic Releases	76.8
Traffic	92.2
Effect Indicators	—
CleanUp Sites	54.3
Groundwater	59.6
Haz Waste Facilities/Generators	54.6

Impaired Water Bodies	66.7
Solid Waste	24.8
Sensitive Population	—
Asthma	63.7
Cardio-vascular	60.6
Low Birth Weights	43.1
Socioeconomic Factor Indicators	—
Education	66.1
Housing	65.2
Linguistic	75.2
Poverty	33.5
Unemployment	60.6

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	38.44475812
Employed	72.42397023
Median HI	50.67368151
Education	—
Bachelor's or higher	67.68895162
High school enrollment	100
Preschool enrollment	74.72090337
Transportation	—
Auto Access	22.93083537
Active commuting	86.88566662

Social	—
2-parent households	32.15706403
Voting	56.82022328
Neighborhood	—
Alcohol availability	9.624021558
Park access	81.35506224
Retail density	29.39817785
Supermarket access	73.02707558
Tree canopy	89.50340049
Housing	—
Homeownership	15.33427435
Housing habitability	17.64403952
Low-inc homeowner severe housing cost burden	6.557166688
Low-inc renter severe housing cost burden	42.98729629
Uncrowded housing	50.73784165
Health Outcomes	—
Insured adults	21.67329655
Arthritis	86.1
Asthma ER Admissions	40.8
High Blood Pressure	84.3
Cancer (excluding skin)	71.8
Asthma	65.7
Coronary Heart Disease	74.7
Chronic Obstructive Pulmonary Disease	71.2
Diagnosed Diabetes	57.0
Life Expectancy at Birth	64.6
Cognitively Disabled	56.3

Physically Disabled	77.4
Heart Attack ER Admissions	57.0
Mental Health Not Good	48.5
Chronic Kidney Disease	73.0
Obesity	54.6
Pedestrian Injuries	59.1
Physical Health Not Good	50.9
Stroke	75.8
Health Risk Behaviors	—
Binge Drinking	35.4
Current Smoker	47.6
No Leisure Time for Physical Activity	54.1
Climate Change Exposures	—
Wildfire Risk	53.8
SLR Inundation Area	0.0
Children	83.0
Elderly	57.3
English Speaking	18.0
Foreign-born	82.0
Outdoor Workers	80.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	51.0
Traffic Density	58.5
Traffic Access	87.4
Other Indices	—
Hardship	46.5
Other Decision Support	—

2016 Voting	38.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	53.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project plans. Population derived from Fehr & Peers, Draft Transportation Assessment – Sunset + Everett Project; July 2023. Estimates from City of Los Angeles VMT Calculator, version 1.3.
Construction: Construction Phases	Developer information
Construction: Off-Road Equipment	Developer information
Construction: Trips and VMT	Assumes 10 CY haul truck capacity
Operations: Hearths	Project plans

Operations: Vehicle Data	—

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CONSTRUCTION BUILDING DEBRIS

Materials	Total SF	Height	Cubic Yards	Pounds per Cub	Tons	Truck Capacity (CY)	Truck Trips	Source
Construction and Debris	0	0	-	484	-	10	-	Florida Department of Environmental Protection A Fact Sheet for C&D Debris Facility Operators
General Building		12	-	1,000	-	10	-	*Federal Emergency Management Agency, Debris Estimating Field Guide (FEMA 329), September 2010. General Building Formula*
Single Family Residence	-	12	-	1,000	-	10	-	Federal Emergency Management Agency. Debris Estimating Field Guide (FEMA 329), September 2010. Single Family Residence Formula, assumes 1 story, Medium vegetative cover multiplier (1.3)
Multi-Family Residence		12	-	1,000	-	10	-	
Mobile Home				1,000	-	10	-	
Mixed Debris	1,344	10	498	480	119	10	100	Florida Department of Environmental Protection A Fact Sheet for C&D Debris Facility Operators
Vegetative Debris (Hardwoods)			-	500	-	10	-	
Vegetative Debris (Softwoods)	16,028	10	5,936	333	989	10	1,187	
Asphalt or concrete (Constructior	6,000	0.5	111	2,400	133	10	22	
TOTAL			6,545		1,242		1,309	

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MATES V TOXIC EMISSIONS OVERVIEW

About Air Toxics Cancer Risk

Information about community profile statistics
Information about emission sources
Download PDF

Residential Air Toxics Cancer Risk at MATES Monitoring Sites

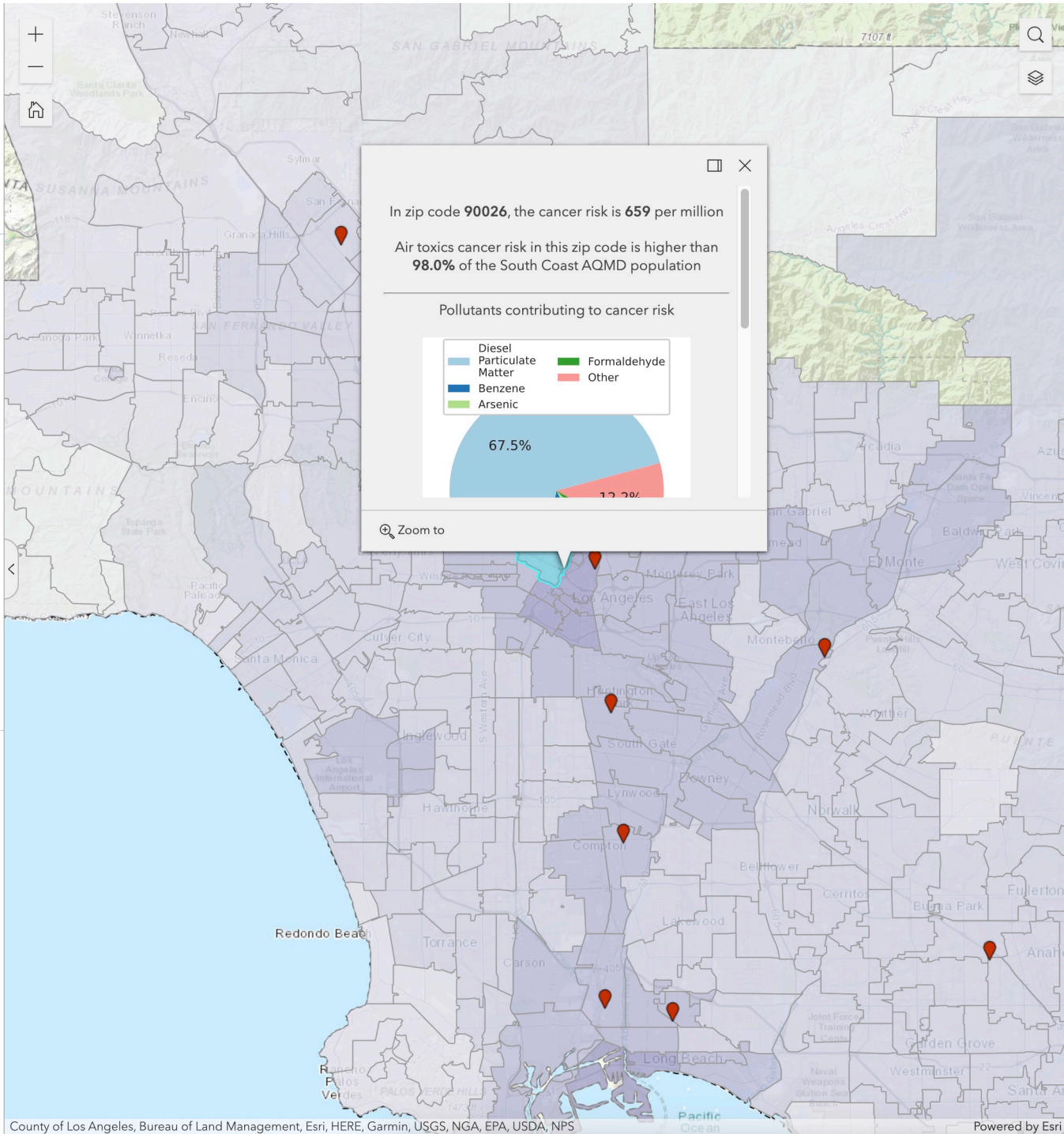
Residential Air Toxics Cancer Risk Calculated from Model Data

Cancer Risk [per million]

- 1601 - 4800
- 1451 - 1600
- 1301 - 1450
- 1151 - 1300
- 1001 - 1150
- 851 - 1000
- 701 - 850
- 551 - 700
- 401 - 550
- 251 - 400
- 101 - 250
- 0 - 100

South Coast AQMD Boundary

The air toxics cancer risk data presented in the MATES Data Visualization is calculated using a population-weighted average.



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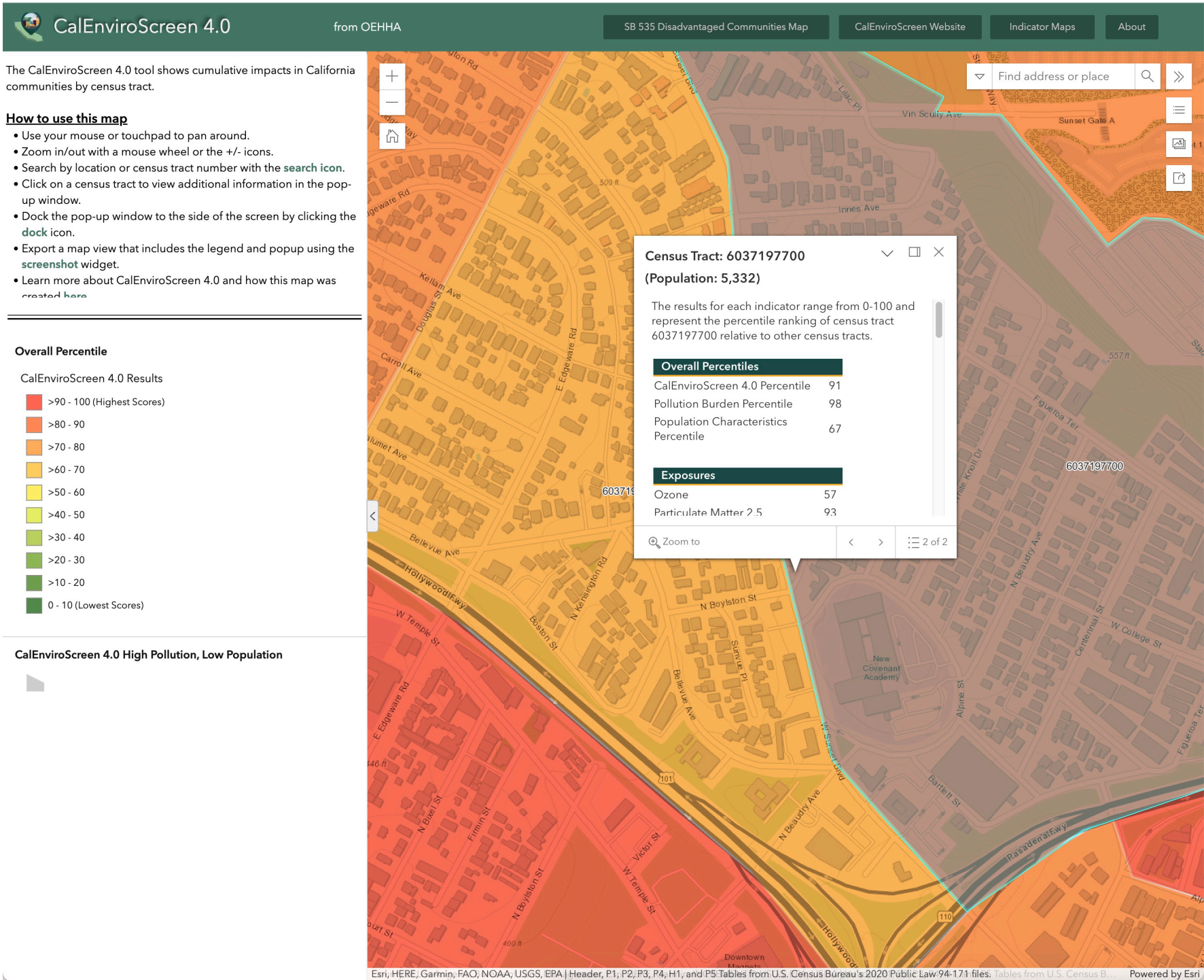
CALENVIROSCREEN 4.0 OUTPUT


CalEnviroScreen 4.0
from OEHHA
SB 535 Disadvantaged Communities Map
CalEnviroScreen Website
Indicator Maps
About
The CalEnviroScreen 4.0 tool shows cumulative impacts in California communities by census tract.
How to use this map
• Use your mouse or touchpad to pan around.
• Zoom in/out with a mouse wheel or the +/- icons.
• Search by location or census tract number with the search icon.
• Click on a census tract to view additional information in the pop-up window.
• Dock the pop-up window to the side of the screen by clicking the dock icon.
• Export a map view that includes the legend and popup using the screenshot widget.
• Learn more about CalEnviroScreen 4.0 and how this map was created here
Overall Percentile
CalEnviroScreen 4.0 Results
>90 - 100 (Highest Scores)
>80 - 90
>70 - 80
>60 - 70
>50 - 60
>40 - 50
>30 - 40
>20 - 30
>10 - 20
0 - 10 (Lowest Scores)
CalEnviroScreen 4.0 High Pollution, Low Population
Find address or place
Census Tract: 6037197700
(Population: 5,332)
The results for each indicator range from 0-100 and represent the percentile ranking of census tract 6037197700 relative to other census tracts.
Overall Percentiles
CalEnviroScreen 4.0 Percentile 91
Pollution Burden Percentile 98
Population Characteristics Percentile 67
Exposures
Ozone 57
Particulate Matter 2.5 93
Zoom to
2 of 2
6037197700
Esri, HERE, Garmin, FAO, NOAA, USGS, EPA | Header, P1, P2, P3, P4, H1, and P5 Tables from U.S. Census Bureau's 2020 Public Law 94-171 files. Tables from U.S. Census B...
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CUMULATIVE PROJECTS

Table 2: Related Projects

ID	PROJECT TITLE	PROJECT ADDRESS	LAND USE	SIZE	Trip Generation Estimates [a]					
					AM PEAK HOUR			PM PEAK HOUR		
					In	Out	Total	In	Out	Total
1	Firmin Court Residential	418 N Firmin St	Apartments	64 du	6	9	15	6	4	10
2	Barlow Skilled Nursing Facility	2000 N Stadium Way	Medical	80.545 ksf	19	7	26	11	22	33
3	Evertt St (2016) Project	1013 N Everett St	Apartments	49 du	5	20	25	19	10	29
4	Apartments	1246 W Court St	Apartments	54 du	6	22	28	21	12	33
5	Kaiser LA Specialty Medical Center	765 W College St	Medical	100 ksf	178	48	226	78	198	276
			Mental Health Facility	62 beds						
6	1274 Sunset Hotel	1274 Sunset Blvd	Hotel	8 rooms	2	2	4	3	2	5
			Restaurant	1.47 ksf	11	9	20	12	12	24
7	1275 Sunset Residential	1275 Sunset Blvd	Apartments	77 du	7	20	27	18	12	30
8	1111 Sunset Mixed Use	1111 Sunset Blvd	Mixed Use	N/A [b]	241	290	531	386	282	668

du = dwelling units
ksf = one thousand square feet
[a] Based on information provided by LADOT on February 3, 2023 and *ITE Trip Generation Manual, 11th ed* , 2021
[b] Trip generation estimates for 1111 Sunset Mixed Use drawn from the project's Draft EIR.