

AIR QUALITY TECHNICAL REPORT

for the proposed

AVA PACIFIC BEACH PROJECT CITY OF SAN DIEGO

PRJ-1059329

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GLOSSARY OF TERMS AND ACRONYMS

Acronym	Description
AB	Assembly Bill
ACM	Asbestos Containing Material
ADT	Average Daily Trips
AQIA	Air Quality Impact Analysis
ATCM	Airborne Toxic Control Measure
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDP	Coastal Development Permit
CO	Carbon Monoxide
CPA	Community Plan Amendment
DPM	Diesel Particulate Matter
DU	Dwelling Unit
du/nra	Dwelling Unit per Residential Acre
°F	Degrees Fahrenheit
g/L	Grams per Liter
HHI	Health Hazard Index
H ₂ S	Hydrogen Sulfide
lb/day	Pounds per Day
µg/m ³	Micrograms per Cubic Meter
mg/m ²	Milligrams per Square Meter
MSL	Mean Sea Level
N/A	Not Applicable or Not Available
NAAQS	National Ambient Air Quality Standards
NO ₂	Nitrogen Dioxide
NO _x	Oxides of Nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
O ₃	Ozone
PBCP	Pacific Beach Community Plan
Pb	Lead
PM _{2.5}	Particulate Matter 2.5 Micrometers or Less in Aerodynamic Diameter
PM ₁₀	Particulate Matter 10 Micrometers or Less in Aerodynamic Diameter
ppm	Parts per Million
RAQS	Regional Air Quality Strategy
ROG	Reactive Organic Gases
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy

GLOSSARY OF TERMS AND ACRONYMS

Acronym	Description
SD	San Diego
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SO _x	Oxides of Sulfur
TAC	Toxic Air Contaminant
Tons/year	Tons Per Year
USEPA	US Environmental Protection Agency
VOC	Volatile Organic Compounds

EXECUTIVE SUMMARY

This report is an analysis of the potential air quality impacts associated with the proposed AVA Pacific Beach multi-family apartment development (Project). The Project site is in the jurisdiction of the City of San Diego and the San Diego County Air Pollution Control District (SDAPCD). The analysis includes an assessment of potential impacts associated with air emissions from the construction and operation activities that would be associated with the development. The air quality analysis for this Project was performed following the City's California Environmental Quality Act guidelines *Significance Determination Thresholds* (City of SD 2022).

The AVA Pacific Beach site occupies approximately 12.96-acres within the Crown Point neighborhood of the Pacific Beach community. Located at 3823, 3863, 3913 Ingraham Street and 3952 Jewell Street, the Project site is currently developed as 564 multi-family apartment units, associated resident amenities, and approximately five acres of surface parking totaling 765 parking spaces.

The Project involves the re-development of underutilized portions of the site (a surface parking lot in the southern portion of the site, the parking lot with recreational amenity cover in the northern portion of the site, and surface parking in the east-central portion of the site) with an additional 138 residential units and 20 parking spaces. Additionally, two new parking structures – one located in the southern portion of the site and the other located in the northern portion of the site – would be constructed to house the majority of Project parking spaces. The Project would result in a total of 702 residential units (564 existing plus 138 proposed) and 777 parking spaces (128 existing and 649 proposed).

The Project site has a land use designation of Multifamily in the Pacific Beach Community Plan and Local Coastal Program Land Use Plan (PBCP) and is further identified as 29 to 43 dwelling units per net residential acre (du/nra). With redeveloping a portion of underutilized areas on the Project site, the total number of units onsite would increase to 702 units, or 54.2 du/nra. Therefore, the Project would require a Community Plan Amendment (CPA) to change the density on-site to be consistent with the ultimate Project proposed. The Project site is zoned RM-3-7, which allows for a multi-family residential density of up to 43.56 dwelling units per acre (du/ac). Similar to the CPA, the Project would require a Rezone to change the current zoning designation (RM-3-7) to RM-3-8, which allows up to 54.45 du/ac.

In addition to the CPA and Rezone, other discretionary permits that will be required for the project entitlements include a Coastal Development Permit (CDP), due to the Project's location within the Coastal Overlay Zone, and a Neighborhood Development Permit, to allow for certain deviations to the requirements of the proposed RM-3-8 zone.

Construction is assumed to begin in mid-2024, and the first year of operation is

assumed to be 2028.

Air quality modeling was performed in general accordance with the methodologies outlined in the SDAPCD 2022 Regional Air Quality Strategy (RAQS) to identify both construction and operational emissions associated with the proposed Project. All emissions were calculated using the California Emissions Estimator Model (CalEEMod) software version 2022.1.1.17 which incorporates current air emission data, planning methods and protocol approved by the State of California Air Resources Board (CARB).

Construction of the proposed Project would not exceed the SDAPCD regional construction emission thresholds for daily emissions. Operation of the proposed Project would generate emissions less than the SDAPCD thresholds of significance and as such, would also not cause impacts to nearby sensitive receptors. The proposed Project would also not conflict with implementation of the applicable air quality plans and would not expose sensitive receptors to carbon monoxide hotspots, or substantial odors. Therefore, the proposed Project would have a less than significant impact on air quality.

1.0 INTRODUCTION

1.1 Project Description

The AVA Pacific Beach Project is located on a site consisting of four parcels totaling 12.96 acres in size in the PBCP area, 4.35 acres of which would be redeveloped. The parcels are bordered by Ingraham Street to the west, Jewell Street to the east, La Playa Avenue to the south, and Fortuna Avenue to the north. The Project site is currently occupied by three existing parking lots that will be demolished. A total of 138 residential units, including six affordable housing units, are planned. The unit mix would include one-bedroom and two-bedroom units in two- and three-level buildings. Parking would be provided in two parking structures plus 20 ground-level parking spaces.

A total of 762 parking spaces (128 existing spaces that will remain following project construction and 634 spaces proposed within the new parking structures and a surface lot) would be provided. Site access would be provided via any of the streets bordering the Project. The Site Plan and Project Information Sheet are provided in Appendix A.

There are currently three parking lots and a volleyball court on the site that would be demolished prior to grading. Approximately 4.3 acres of the Project site would be graded. Grading would involve approximately 3,460 cubic yards of cut, and 4,547 cubic yards of fill, for 1,087 cubic yards of import. Construction is assumed to begin in mid-2024, and the first year of operation is assumed to be 2028.

The PBCP designates the parcel as RM-3-7, multi-family housing, with a density of up to 43.56 dwelling units/acre (du/acre) (City of SD 2020). The Project would require a Rezone to change the current zoning designation (RM-3-7) to RM-3-8, which allows up to 54.45 du/ac. The Project requires a CPA update to change the density on-site to allow for the density proposed by the project and to be consistent with the proposed RM-3-8 zone.

1.2 Project Location

The Project site is located east of Ingraham Street, west of Jewell Street, north of La Playa Avenue, and south of Fortuna Avenue, within the Pacific Beach community in the City of San Diego (the "City"), which is in the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). Surrounding uses consist mostly of single and multi-family residences, as well as some commercial/retail land uses.

1.3 Purpose of this Analysis

This analysis includes an assessment of potential impacts associated with air emissions from the construction and operation activities that would be associated with the development. The analysis provided within this report addresses the City's *California Environmental Quality Act Significance Determination Thresholds* (City of SD 2022).

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

The Project site is within the Pacific Beach community in the City of San Diego, which is located within the San Diego Air Basin (SDAB). The 12.96-acre Project site is currently occupied by 564 multi-family apartment units, associated resident amenities, and approximately five acres of surface parking lots. Elevations within the area of the parcel range from approximately 31 feet above Mean Sea Level (MSL) at the southwest end to approximately 49 feet above MSL at the northwest end.

2.2 Climate and Meteorology

The Pacific Beach community planning area, like the rest of San Diego County's coastal areas, has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. The mean annual temperature for the Project area is 62 degrees Fahrenheit (°F). The average annual precipitation is 12 inches, falling primarily from November to April. Winter low temperatures in the Project area average about 41°F, and summer high temperatures average about 78°F.

The dominant meteorological feature affecting the region is the Pacific High-Pressure Zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from the coast toward the inland areas. Consequently, air quality near the coast is generally better than that which occurs at the base of the coastal mountain range.

Fluctuations in the strength and pattern of winds from the Pacific High-Pressure Zone interacting with the daily local cycle produce periodic temperature inversions that influence the dispersal or containment of air pollutants in the SDAB. Beneath the inversion layer pollutants become "trapped" as their ability to disperse diminishes. The mixing depth is the area under the inversion layer. Generally, the morning inversion layer is lower than the afternoon inversion layer. The greater the change between the morning and afternoon mixing depths, the greater the ability of the atmosphere to disperse pollutants.

The prevailing westerly wind pattern is sometimes interrupted by regional "Santa Ana" conditions. A Santa Ana occurs when a strong high-pressure system develops over the Nevada-Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds from the east over the mountains and out to sea.

Strong Santa Anas tend to blow pollutants out over the ocean, producing clear days. However, at the onset or during breakdown of these conditions, or if the Santa Ana is weak, local air quality may be adversely affected. In these cases, emissions from the South Coast Air Basin (including Los Angeles) to the north are blown out over the ocean, and low pressure over Baja California draws this pollutant-laden air mass southward. As the high pressure weakens, prevailing northwesterly winds reassert themselves and

send this cloud of contamination ashore in the SDAB. When this event does occur, the combination of transported contaminants from Los Angeles and Mexico, in addition to locally produced contaminants, produces the worst air quality measurements recorded in the basin.

2.3 Pollutants of Concern and Their Effects

2.3.1 Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards (criteria) for outdoor concentrations to protect public health. The seven criteria air pollutants defined by state and federal law as a risk to the health and welfare of the general public are as follows: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), respirable particulate matter (or particulate matter with an aerodynamic diameter of 10 microns or less, PM₁₀), fine particulate matter (or particulate matter with an aerodynamic diameter of 2.5 microns or less, PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb). Criteria pollutants can be emitted directly from sources (primary pollutants such as CO, SO₂, PM₁₀, PM_{2.5}, and lead) or they may be formed through chemical and photochemical reactions of precursor pollutants in the atmosphere (secondary pollutants such as ozone, NO₂, PM₁₀ and PM_{2.5}). PM₁₀ and PM_{2.5} can be both primary and secondary pollutants. The principal precursor pollutants of concern are reactive organic gases (ROG) also known as volatile organic compounds (VOC), and nitrogen oxides (NO_x). The federal standards are known as the National Ambient Air Quality Standards (NAAQS).

CARB sets the laws and regulations for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) are either the same as or more restrictive than the NAAQS and also set limits for four additional contaminants: Visibility Reducing Particles, sulfates, hydrogen sulfide (H₂S) and vinyl chloride.

2.3.2 Non-Criteria Air Pollutants

2.3.2.1 Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a Toxic Air Contaminant (TAC). TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air.

In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant

risk, and development of effective strategies to reduce potential risks to the public over five years. Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills.

Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

2.3.2.2 Diesel Particulate Matter

Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than one micrometer in diameter (about 1/70th the diameter of a human hair) and, thus, is a subset of PM_{2.5} (CARB 2023a). DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2023a). On August 27, 1998, CARB and Office of Environmental Health Hazard Assessment (OEHHA) identified "particulate emissions from diesel-fueled engines" (i.e., DPM) as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease (CalEPA 1998).

DPM is emitted from a broad range of diesel engines, including on-road diesel engines from trucks, buses, and cars; and off-road diesel engines from locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of PM_{2.5}, DPM also contributes to the same non-cancer health effects as PM_{2.5} exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2023a). Those most vulnerable to non-cancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems.

2.3.2.3 Odorous Compounds

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and, overall, is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more

likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

3.0 REGULATORY SETTING

3.1 Federal Regulations

3.1.1 Criteria Air Pollutants

The federal air quality standards were developed per the requirements of The Federal Clean Air Act (CAA), which is a federal law that was passed in 1970 and further amended in 1990. This law provides the basis for the national air pollution control effort. An important element of the act included the development of NAAQS for major air pollutants.

The CAA established two types of air quality standards known as primary and secondary standards for the following criteria air pollutants: O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead. Primary standards set limits for the intention of protecting public health, which includes sensitive populations such as people with asthma, children and elderly. Secondary standards set limits to protect public welfare to include the protection against decreased visibility, damage to animals, crops, vegetation and buildings. Areas that do not meet the NAAQS for a particular pollutant are considered to be “non-attainment areas” for that pollutant. States that have these non-attainment areas must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the standards within mandated time frames.

3.1.2 Hazardous Air Pollutants

The 1977 federal CAA amendments required the United States Environmental Protection Agency (USEPA) to identify national emission standards for hazardous air pollutants to protect public health and welfare. Hazardous air pollutants include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 CAA amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

3.2 State Regulations

3.2.1 Criteria Air Pollutants

The federal CAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the CAA and regulating emissions from motor vehicles and

consumer products. CARB has established the CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, PM_{2.5}, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. Table 1 on the next page shows the ambient air quality standards for NAAQS and CAAQS.

In addition to the above responsibilities, CARB assembles the State Implementation Plan (SIP) for areas that are out of attainment of the NAAQS; this planning document satisfies the federal Clean Air Act requirement. Since the San Diego area is out of attainment of the federal ozone standard, the SDAPCD must submit input to the SIP in the form of ozone-related plans and control measures for bringing the area into attainment. The SIP is typically updated on a triennial basis; however, the latest SIP update was submitted by the CARB to the USEPA in 2016; CARB is currently assembling strategy documentation for its 2022 SIP submittal. The latest SDAPCD revisions to the SIP were submitted in October 2020: *2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County* (SDAPCD 2020a).

3.2.2 Toxic Air Contaminants

A TAC is defined by California law as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Federal laws use the hazardous air pollutants to refer to the same types of compounds that are referred to as TACs under state law. California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. Pursuant to AB 2588, existing facilities that emit air pollutants above specified levels are required to (1) prepare a TAC emission inventory plan and report; (2) prepare a risk assessment if TAC emissions were significant; (3) notify the public of significant risk levels; and (4) if health impacts were above specified levels, prepare and implement risk reduction measures.

**TABLE 1
NATIONAL AND STATE AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM2.5) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Idling of Commercial Heavy-Duty Trucks (13 CCR 2485):

In July 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to control emissions from idling trucks. The ATCM prohibits idling for more than five minutes for all commercial trucks with a gross vehicle weight rating over 10,000 pounds. The ATCM contains an exception that allows trucks to idle while queuing or involved in operational activities.

In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.):

In July 2007, CARB adopted an ATCM for in-use off-road diesel vehicles. This regulation requires that specific fleet average requirements are met for NO_x emissions and for particulate matter emissions. Where average requirements cannot be met, best available control technology requirements apply. The regulation also includes several recordkeeping and reporting requirements.

In response to AB 8 2X, which was signed into law to provide economic relief and to preserve jobs in the construction industry, the regulations were revised in July 2009 (effective December 3, 2009) to allow a partial postponement of the compliance schedule in 2011 and 2012 for existing fleets. On December 17, 2010, CARB adopted additional revisions to further delay the deadlines reflecting reductions in diesel emissions due to the poor economy and overestimates of diesel emissions in California. The revisions delayed the first compliance date until no earlier than January 1, 2014, for large fleets, with final compliance by January 1, 2023. The compliance dates for medium fleets were delayed until an initial date of January 1, 2017, and final compliance date of January 1, 2023. The compliance dates for small fleets were delayed until an initial date of January 1, 2019, and final compliance date of January 1, 2028. Correspondingly, the fleet average targets were made more stringent in future compliance years. The revisions also accelerated the phaseout of older equipment with newer equipment added to existing large and medium fleets over time, requiring the addition of Tier 2 or higher engines starting on March 1, 2011, with some exceptions: Tier 2 or higher engines on January 1, 2013, without exception; and Tier 3 or higher engines on January 1, 2018 (January 1, 2023, for small fleets).

On October 28, 2011 (effective December 14, 2011), the Executive Officer approved amendments to the regulation. The amendments included revisions to the applicability section and additions and revisions to the definition. The initial date for requiring the addition of Tier 2 or higher engines for large and medium fleets, with some exceptions, was revised to January 1, 2012. New provisions also allow for the removal of emission control devices for safety or visibility purposes. The regulation also was amended to combine the particulate matter and NO_x fleet average targets under one, instead of two, sections. The amended fleet average targets are based on the fleet's NO_x fleet average, and the previous section regarding particulate matter performance requirements was deleted completely. The best available control technology requirements, if a fleet cannot comply with the fleet average requirements, were restructured and clarified. Other amendments to the regulations included minor administrative changes to the regulatory text.

In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025):

On December 12, 2008, CARB adopted an ATCM to reduce NO_x and particulate matter emissions from most in-use on-road diesel trucks and buses with a gross vehicle weight rating greater than 14,000 pounds. The original ATCM regulation required fleets of on-road trucks to limit their NO_x and particulate matter emissions through a combination of exhaust retrofit equipment and new vehicles. The regulation limited particulate matter emissions for most fleets by 2011, and limited NO_x emissions for most fleets by 2013. The regulation did not require any vehicle to be replaced before 2012 and never required all vehicles in a fleet be replaced.

In December 2009, the CARB Governing Board directed staff to evaluate amendments that would provide additional flexibility for fleets adversely affected by the struggling California economy. On December 17, 2010, CARB revised this ATCM to delay its implementation along with limited relaxation of its requirements. Starting on January 1, 2015, lighter trucks with a gross vehicle weight rating of 14,001 to 26,000 pounds with 20-year-old or older engines need to be replaced with newer trucks (2010 model year emissions equivalent as defined in the regulation). Trucks with a gross vehicle weight rating greater than 26,000 pounds with 1995 model year or older engines needed to be replaced as of January 1, 2015. Trucks with 1996 to 2006 model year engines must install a Level 3 (85% control) diesel particulate filter starting on January 1, 2012, to January 1, 2014, depending on the model year, and then must be replaced after eight years. Trucks with 2007 to 2009 model year engines have no requirements until 2023, at which time they must be replaced with 2010 model year emissions-equivalent engines, as defined in the regulation. Trucks with 2010 model year engines would meet the final compliance requirements. The ATCM provides a phase-in option under which a fleet operator would equip a percentage of trucks in the fleet with diesel particulate filters, starting at 30% as of January 1, 2012, with 100% by January 1, 2016. Under each option, delayed compliance is granted to fleet operators who have or will comply with requirements before the required deadlines.

On September 19, 2011 (effective December 14, 2011), the Executive Officer approved amendments to the regulations, including revisions to the compliance schedule for vehicles with a gross vehicle weight rating of 26,000 pounds or less to clarify that all vehicles must be equipped with 2010 model year emissions equivalent engines by 2023. The amendments included revised and additional credits for fleets that have downsized; implement early particulate matter retrofits; incorporate hybrid vehicles, alternative-fueled vehicles, and vehicles with heavy-duty pilot ignition engines; and implement early addition of newer vehicles. The amendments included provisions for additional flexibility, such as for low-usage construction trucks, and revisions to previous exemptions, delays, and extensions. Other amendments to the regulations included minor administrative changes to the regulatory text, such as recordkeeping and reporting requirements related to other revisions.

California Health and Safety Code Section 41700:

Section 41700 of the California Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material

that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

3.3 Local Regulations

3.3.1 San Diego Air Pollution Control District

While CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The Project site is located within the SDAB and is subject to the guidelines and regulations of the SDAPCD.

In San Diego County (County), O₃ and particulate matter are the pollutants of main concern, since exceedances of state ambient air quality standards for those pollutants have been observed in most years. For this reason, the SDAB has been designated as a non-attainment area for the state PM₁₀, PM_{2.5}, and O₃ standards. The SDAB is also a federal O₃ attainment (maintenance) area for the 1997 8-hour O₃ standard, an O₃ non-attainment area for the 2008 8-hour O₃ standard, and a CO maintenance area (western and central part of the SDAB only, including the Project site area).

Federal Attainment Plans:

In October 2020, the SDAPCD adopted an update to the Eight-Hour Ozone Attainment Plan for San Diego County (2008 O₃ NAAQS), which indicated that local controls and state programs would allow the region to reach attainment of the federal 8-hour O₃ standard (2015 O₃ NAAQS) by August 2024 (SDAPCD 2020a). In this plan, SDAPCD relies on the Regional Air Quality Strategy (RAQS) to demonstrate how the region will comply with the federal O₃ standard. The RAQS details how the region will manage and reduce O₃ precursors (NO_x and VOC) by identifying measures and regulations intended to reduce these pollutants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and the USEPA. Incentive programs for reduction of emissions from heavy duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS.

Currently, the County is designated as serious non-attainment for the 2008 NAAQS and moderate non-attainment for the 2015 NAAQS. As documented in the 2020 Plan (SDAPCD 2020a), the County needs to demonstrate how the region will further reduce air pollutant emissions in order to attain the current NAAQS for ozone by specified dates. Although total regionwide NO_x and VOC emissions (precursors for ozone formation) were reduced by over 60% and 50%, respectively, during the 2000-2018 time period, and large portions of the region meet both federal ozone standards, there are a few areas of the County that do not. These region-wide air quality improvements are the result of increasingly stringent air pollution regulations over the years that address issues such as the transition to low-emission cars, stricter new source review rules, and continuing the requirement of general conformity for military growth and the San Diego

International Airport. The County will continue emission control measures, including ongoing implementation of existing regulations in O₃ precursor reduction to stationary and area-wide sources, subsequent inspections of facilities and sources, and the adoption of laws requiring best available retrofit control technology for control of emissions. Nevertheless, in order to attain the federal ozone standards, the region still requires further reductions of air pollutants, especially from mobile sources as they contribute 65% of all ozone-forming pollutants emitted in San Diego County in 2020 (SDAPCD 2020a).

Air pollution is largely a cumulative impact. The non-attainment status of regional pollutants is a result of past and present development, and the SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

The SDAB is designated under the California and National AAQS as non-attainment for O₃ and under the CAAQS as non-attainment for PM₁₀ and PM_{2.5} (SDAPCD 2023b). The poor air quality in the SDAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., VOCs and NO_x for O₃) potentially contribute to poor air quality. In analyzing cumulative impacts from a project, the analysis must specifically evaluate the project's contribution to the cumulative increase in pollutants for which the SDAB is designated as non-attainment for the CAAQS and NAAQS. If the project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, exceed established thresholds. However, a project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

State Attainment Plans:

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The RAQS for the SDAB was initially adopted in 1991 and is updated periodically, most recently in 2022 (SDAPCD 2023). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O₃. The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County and the cities in the County, to forecast future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans (SANDAG 2021a).

In March 2023, the SDAPCD adopted the revised RAQS for the County. The SDAPCD expects to continue reductions of ozone precursors through 2035 (SDAPCD 2023). Past reductions have been achieved through implementation of six VOC control measures and three NO_x control measures adopted in the SDAPCD's 2009 RAQS (SDAPCD 2009a). The SDAPCD is considering additional measures, including three VOC measures and four control measures to reduce 0.3 daily tons of VOC and 1.2 daily tons of NO_x, provided they are found to be feasible region-wide. In addition, SDAPCD has implemented nine incentive-based programs, has worked with SANDAG to implement regional transportation control measures, and has reaffirmed the state emission offset repeal.

In December 2005, the SDAPCD prepared a report titled "Measures to Reduce Particulate Matter in San Diego County" to address implementation of Senate Bill (SB) 656 in the County (SB 656 required additional controls to reduce ambient concentrations of PM₁₀ and PM_{2.5}) (SDAPCD 2005). In the report, SDAPCD evaluated implementation of source-control measures that would reduce particulate matter emissions associated with residential wood combustion; various construction activities including earthmoving, demolition, and grading; bulk material storage and handling; carry-out and track-out removal and cleanup methods; inactive disturbed land; disturbed open areas; unpaved parking lots/staging areas; unpaved roads; and windblown dust (SDAPCD 2005).

The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for ozone. In addition, the SDAPCD relies on the SIP, which includes the SDAPCD's plans and control measures for attaining the ozone NAAQS. These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. Mobile sources are regulated by the CalEPA and the CARB, and the emission and reduction strategies related to mobile sources are considered in the RAQS and SIP.

The RAQS relies on information from CARB and SANDAG, including projected growth in the County, and mobile, area, and all other source emissions in order to project future emissions and determine from that the strategies necessary for the reduction of stationary source emissions through regulatory controls. The CARB's mobile source emission projections and SANDAG's growth projections are based on population and vehicle trends, and land use plans developed by the cities and by the County. As such, projects that propose development that is consistent with the growth anticipated by these land use plans would be consistent with the RAQS. In the event that a project proposes development which is less dense than anticipated within the adopted land use plans, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the adopted land use plans and SANDAG's growth projections upon which the RAQS is based, the project would be in conflict with the RAQS and SIP and could have a potentially significant impact on air quality. This situation would warrant further analysis to determine if the proposed project and the surrounding projects would exceed the growth projections used in the RAQS for the specific subregional area.

SDAPCD Rules and Regulations:

As stated above, the SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations apply to all sources in the jurisdiction of SDAPCD and would apply to any proposed projects on the Project site.

SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance: This rule prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1976). Any criteria air pollutant emissions, TAC emissions, or odors that would be generated during construction or operation of any development project in the parcel area would be subject to SDAPCD Rule 51. Violations can be reported to the SDAPCD in the form of an air quality complaint by telephone, email, and online form. Complaints are investigated by the SDAPCD as soon as possible.

SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust: This rule regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project area (SDAPCD 2009b). Construction activities, primarily during earth-disturbing activities, may result in fugitive dust emissions that would be subject to SDAPCD Rule 55. Fugitive dust emissions are not anticipated during onsite operation of the development.

SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: Architectural Coatings: This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2021b). Construction and operation activities would include application of architectural coatings (e.g., paint and other finishes), which are subject to SDAPCD Rule 67.0.1. Architectural coatings used in the reapplication of coatings during operation of the development would be subject to the VOC content limits identified in SDAPCD Rule 67.0.1, which applies to coatings manufactured, sold, or distributed within the County.

SDAPCD Regulation XII: Toxic Air Contaminants; Rule 1206: Asbestos Removal: This rule requires owners and operators of any renovation or demolition operation (with a few exceptions) to perform a facility survey to determine the presence or absence of Asbestos Containing Material (ACM), regardless of the age of the facility, prior to the renovation or demolition of building(s) (SDAPCD 2017). Owners or operators are required to notify the District prior to the demolition and removal of ACM, and to hire a trained ACM removal firm to remove and dispose of any ACM per the rule. Since no buildings are involved in the demolition activity, this rule is not applicable to the Project.

3.3.2 San Diego Association of Governments

SANDAG is the regional planning agency for the County and serves as a forum for regional issues relating to transportation, the economy, community development, and

the environment. SANDAG serves as the federally designated metropolitan planning organization for the County. With respect to air quality planning and other regional issues, SANDAG has prepared *San Diego Forward: The Regional Plan (Regional Plan) for the San Diego Region* (SANDAG 2021a). The Regional Plan combines the big-picture vision for how the region will grow over the next 30 years with an implementation program to help make that vision a reality. The Regional Plan, including its Sustainable Communities Strategy (SCS), is built on an integrated set of public policies, strategies, and investments to maintain, manage, and improve the transportation system so that it meets the diverse needs of the San Diego region through 2050.

In regard to air quality, the Regional Plan sets the policy context in which SANDAG participates in and responds to the air district's air quality plans and builds off the air district's air quality plan processes that are designed to meet health-based criteria pollutant standards in several ways (SANDAG 2021a). First, it complements air quality plans by providing guidance and incentives for public agencies to consider best practices that support the technology-based control measures in air quality plans. Second, the Regional Plan emphasizes the need for better coordination of land use and transportation planning, which heavily influences the emissions inventory from the transportation sectors of the economy. This also minimizes land use conflicts, such as residential development near freeways, industrial areas, or other sources of air pollution.

On September 23, 2022, SANDAG's Board of Directors adopted the final 2023 Regional Transportation Improvement Program, which is a multibillion-dollar, multiyear program of proposed major transportation projects in the San Diego region. Transportation projects funded with federal, state, and TransNet (the San Diego transportation sales tax program) must be included in an approved Regional Transportation Improvement Program. The programming of locally funded projects also may be programmed at the discretion of the agency. The 2023 Regional Transportation Improvement Program covers five fiscal years and incrementally implements the Regional Plan (SANDAG 2022).

3.3.3 City of San Diego

The San Diego Municipal Code addresses air quality and odor impacts in Chapter 14, Article 2, Division 7 paragraph 142.0710, "Air Contaminant Regulations," which states that air contaminants including smoke, charred paper, dust, soot, grime, carbon, noxious acids, toxic fumes, gases, odors, and particulate matter, or any emissions that endanger human health, cause damage to vegetation or property, or cause soiling shall not be permitted to emanate beyond the boundaries of the premises upon which the use emitting the contaminants is located (City of SD 2010).

The San Diego Municipal Code also addresses the hazards of lead-based paint in Chapter 5, Article 4, Division 10, which states that any disturbance or removal of paint from any surface on the interior or exterior of a building constructed prior to January 1, 1979, or from any surface on a steel structure, shall use lead-safe work practice standards, unless a Certified Lead Inspector/Assessor determines, prior to paint removal or disturbance, that the lead concentration in the paint is below 1000 ppm or 0.5 mg/cm² (City of SD 2008a). This rule may apply to the Project, if any of the paint in the volleyball court area to be demolished contains lead.

The City of San Diego's General Plan is comprised of 10 elements that provide a comprehensive slate of citywide policies and further the City of Villages smart growth strategy for growth and development (City of SD 2008b). The General Plan was comprehensively updated by unanimous vote of the City Council in 2008. The City Council also certified the General Plan Program Environmental Impact Report and adopted associated amendments to the Land Development Code. Various updates to the General Plan have occurred since 2008. The General Plan update did not include land use designation or zoning changes, which is the purview of the City's community plans.

Community plans, such as the PBCP, work together with the General Plan to provide location-based policies and recommendations in the City's fifty-plus community planning areas (City of SD 2020). Community plans are written to refine the General Plan's citywide policies, designate land uses and housing densities, and provide additional site-specific recommendations as needed. Showing the project's consistency with both the City's General Plan and PBCP is an important aspect of this air quality analysis. The PBCP designates the Project site as Residential.

3.4 Regional and Local Air Quality Conditions

3.4.1 San Diego Air Basin Attainment Designation

Pursuant to the 1990 federal CAA amendments, the USEPA classifies air basins (or portions thereof) as "attainment" or "non-attainment" for each criteria air pollutant, based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "non-attainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a non-attainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act (CCAA), like its federal counterpart, calls for the designation of areas as "attainment" or "non-attainment," but based on the CAAQS rather than the NAAQS.

A complete listing of the current attainment status with respect to both federal and state non-attainment status by pollutants for the SDAB is shown in Table 2 (SDAPCD 2023b).

TABLE 2
SUMMARY OF SAN DIEGO AIR BASIN (SDAB)
FEDERAL AND STATE ATTAINMENT STATUS

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Non-attainment	Non-attainment
Ozone (1-Hour)	Attainment *	Non-attainment
Carbon Monoxide	Attainment	Attainment
PM ₁₀	Unclassifiable **	Non-attainment
PM _{2.5}	Attainment	Non-attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

* The federal 1-hour standard of 12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in state Implementation Plans.

** At the time of designation, if the available data does not support a designation of attainment or non-attainment, the area is designated as unclassifiable.

3.4.2 Local Ambient Air Quality

The SDAPCD monitors air quality conditions at locations throughout the SDAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants, including criteria pollutants, ozone precursors and TACs, and to determine whether the CAAQS and the NAAQS are met. The monitor closest to the Project site is the San Diego-Kearny Villa Road monitoring station, located approximately 7.38 miles northeast of the Project site. The San Diego-Kearny Villa Road monitoring station does not measure PM₁₀, so the data reported in Table 3 are from the next closest monitoring station with PM₁₀ data: the Chula Vista monitoring station, located approximately 15.2 miles southeast of the Project site. A summary of the data recorded at these monitoring stations from 2019 through 2021 (the latest data available on iADAM) is presented in Table 3.

**TABLE 3
AMBIENT AIR BACKGROUND POLLUTANT
CONCENTRATIONS/EXCEEDANCES/STANDARDS**

Pollutant	2019	2020	2021
Ozone (O₃)			
State maximum 1-hour concentration (ppm)	0.083 ¹	0.123¹	0.095¹
National maximum 8-hour concentration (ppm)	0.075¹	0.102¹	0.071¹
State maximum 8-hour concentration (ppm)	0.076¹	0.102¹	0.072¹
<u>Number of Days Standard Exceeded</u>			
CAAQS 1-hour (>0.09 ppm)	0 ¹	2 ¹	1 ¹
NAAQS 8-hour (>0.070 ppm)/CAAQS 8-hour (>0.070 ppm)	1/1 ¹	10/12 ¹	1/2 ¹
Respirable Particulate Matter (PM₁₀)			
National maximum 24-hour concentration (µg/m ³)	68 ²	68 ²	46 ²
State maximum 24-hour concentration (µg/m ³)	68²	68²	46 ²
State annual average concentration (µg/m ³)	19.0 ²	24.8²	23.9²
<u>Annual or Days Standard Exceeded *</u>			
NAAQS 24-hour (>150 µg/m ³)	0 ²	0 ²	0 ²
CAAQS 24-hour (>50 µg/m ³)/Annual (>20 µg/m ³)	**/No ²	**/Yes ²	**/Yes ²
Fine Particulate Matter (PM_{2.5})			
National maximum 24-hour concentration (µg/m ³)	16.2 ¹	47.5¹	20.9 ¹
National annual average concentration (µg/m ³)	7.0	8.7 ¹	7.6 ¹
State annual average concentration (µg/m ³)	-- ¹	-- ¹	-- ¹
<u>Annual or Days Standard Exceeded *</u>			
NAAQS 24-hour (>35 µg/m ³)/Annual (>12.0 µg/m ³)	0/No ¹	2/No ¹	0/No ¹
CAAQS Annual (>12 µg/m ³)	-- ¹	-- ¹	-- ¹

Notes:

µg/m³ = micrograms per cubic meter; ppm = parts per million; N/A = Not available.

CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard.

BOLD value indicates greater than standard.

1. Measured at the San Diego-Kearney Villa Road station (6125 Kearney Villa Rd in San Diego, approximately 7.38 miles northeast of the Project site) using iADAM Top 4 Summary. PM_{2.5} measurements for state annual concentrations were not included in the iADAM summary.

2. Measured at the Chula Vista station (80 E. J St., Chula Vista, approximately 15.2 miles southeast of the Project site) using SDAPCD 5-Year Air Quality Summary, as there was not a complete set of data for local stations on iADAM.

* In the case of an Annual standard a No or Yes response is provided. And, where applicable, number of days presented are the Estimated Number of days as provided in iADAM (as sampling not performed continuously)

** Number of exceedances are not available in SDAPCD summary.

Source: CARB 2023b, SDAPCD 2023a

3.5 Air Quality Analysis Significance Criteria

The City of San Diego has approved guidelines for determining significance, based upon Appendix G of the California Environmental Quality Act (CEQA) Guidelines (City of SD 2022). A project would have a significant air quality environmental impact if it would:

- a. *Conflict with or obstruct implementation of the applicable air quality plan;*
- b. *Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*
- c. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region (SDAB) is non-attainment under an applicable federal or state ambient standard (including release emissions which exceed quantitative thresholds for ozone precursors);*
- d. *Expose sensitive receptors (including, but not limited to, residences, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations;*
- e. *Create objectionable odors affecting a substantial number of people;*
- f. *Release substantial quantities of air contaminants beyond the boundaries of the premises upon which the stationary source emitting the contaminants is located.*

A significant adverse air quality impact may occur when a project individually or cumulatively interferes with progress toward the attainment of the ozone standard by generating emissions that equal or exceed the established long-term quantitative thresholds for pollutants or exceed a state or federal ambient air quality standard for any criteria pollutant. If a project is found to have a significant effect, the project would have to incorporate mitigation measures.

To determine whether a project would (a) conflict with or obstruct implementation of the applicable air quality plan (that is, the San Diego RAQS or SIP) or (b) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation, or (c) result in a cumulatively considerable net increase of PM₁₀ or exceed quantitative thresholds for ozone precursors (i.e., NO_x and VOCs), project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 (SDAPCD 2020b) for the preparation of Air Quality Impact Assessments (AQIAs).

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. The screening thresholds from Rule 20.2 (SDAPCD 2020b) are included in Table 4. The Rule 20.2 thresholds are the same as in the City's CEQA Significance Determination Thresholds (City of SD 2022), except for ROG. The City thresholds do not

provide screening thresholds for PM_{2.5}. In the absence of adopted thresholds for PM_{2.5} in the City thresholds, the Rule 20.2 thresholds of 67 pounds per day or 10 tons per year were used.

**TABLE 4
SCREENING LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS
CONSTRUCTION AND OPERATIONS**

Pollutant	Daily Threshold (lb/day)	Annual Threshold (tons/year)
Criteria Pollutants		
Respirable Particulate Matter (PM ₁₀)	100	15
Fine Particulate Matter (PM _{2.5})	67	10
Oxides of Nitrogen (NO _x)	250	40
Oxides of Sulfur (SO _x)	250	40
Carbon Monoxide (CO)	550	100
Reactive Organic Gases (ROG) ¹	137	15

Sources: SDAPCD Rule 20.2; City of San Diego CEQA Thresholds (City of SD 2022).

1. For purpose of this analysis, Reactive Organic Gases (ROGs) are considered to be equivalent to Volatile Organic Compounds (VOCs).

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed "sensitive receptors" are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. As identified by the City (City of SD 2022), the following groups and locations should be considered sensitive receptors:

Medical patients at:

- Adult/senior day care
- Senior citizen centers/facilities/retirement homes
- Hospitals/convalescent homes/long-term health care facilities
- Acute care/walk-in ambulatory care clinics
- Rehabilitation centers

Elderly persons/athletes/students/children at:

- Public parks/playgrounds
- Long-term care/assisted living facilities
- Churches

- Schools
- Childcare centers/homes
- Athletic fields

The provisions of these regulations do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals. It is generally accepted that the considerable number of persons requirement in Rule 51 is normally satisfied when 10 different individuals/households have made separate complaints within 90 days. Odor complaints from a “considerable” number of persons or businesses in the area would be considered a significant, adverse odor impact. Therefore, any unreasonable odor discernible at the property line of sensitive receptors would be considered a significant odor impact.

4.0 AIR QUALITY ANALYSIS METHODOLOGY

Air quality modeling for the Project development was performed in general accordance with the methodologies outlined in the SDAPCD 2022 RAQS to identify construction and operational emissions associated with the Project. Criteria pollutant emissions were calculated using the California Emissions Estimator Model (CalEEMod) software version 2022.1.1.17 which incorporates current air emission data, planning methods and protocols approved by CARB (CAPCOA 2022).

As referenced, construction activities would include demolition, site preparation, grading, construction of the buildings/utilities and related improvements, as well as paving parking areas. Construction activities would require the use of equipment that would generate criteria air pollutant emissions. For modeling purposes, it was assumed that all construction equipment would be diesel-powered. Construction emissions associated with the development of the Project site were calculated based on default equipment amounts and types. There are currently three parking lots and a volleyball court on the parcel to be demolished. Construction emissions were analyzed using the regional thresholds published within the City of San Diego Significance Determination Thresholds Guidelines (City of SD 2022).

Operational emissions from the Project would include mobile source emissions, energy emissions, and area source emissions. Mobile source emissions would be generated by motor vehicle trips associated with operation of the Project site. Emissions attributable to energy use include electricity and natural gas consumption for space and water heating. Area source emissions would be generated by landscape maintenance equipment, use of consumer products, and painting. To determine whether a regional air quality impact would occur from this development, the increases in emissions were compared with the operational thresholds published by the City of San Diego (City of SD 2022).

4.1 Construction Emissions

Construction of the development would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM₁₀ and PM_{2.5}) from soil disturbance and exhaust emissions (NO_x, CO, and SO₂) from heavy construction vehicles. As noted,

construction would generally consist of demolition, site preparation and lot grading, construction of the buildings and related improvements, and the application of architectural coating (painting).

Table 5 shows the construction schedule assumed for each of the construction phases at the site. A five-day workweek was assumed with no overlap between the construction phases. Default values were assumed for the number and types of construction equipment for each construction phase. The client has specified Tier 4 Final equipment for all construction phases, so this option was selected in CalEEMod.

TABLE 5 CONSTRUCTION SCHEDULE – AVA PACIFIC BEACH DEVELOPMENT	
Construction Phase	Estimated Dates
Demolition	June 3, 2024 – September 2, 2024
Site Preparation	September 3, 2024 – December 2, 2024
Grading	December 3, 2024 – April 2, 2025
Building Construction	April 3, 2025 – September 2, 2027
Paving	September 3, 2027 – September 23, 2027
Architectural Coating	September 24, 2027 – November 5, 2027

Site preparation and grading would involve the greatest concentration of heavy equipment use and the highest potential for fugitive dust emissions. Any development would be required to comply with SDAPCD Rule 55, which identifies fugitive dust standards and is required to be implemented at all construction sites located within the SDAB. Therefore, the following assumptions 1 through 5, which generally reduce fugitive dust emissions, were included in CalEEMod for site preparation and grading phases of construction. Assumption 6 was included in CalEEMod for the architectural coating phase of construction.

1. **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
2. **Soil Treatment.** Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least three times daily, preferably at the start of each morning, mid-day, and after work is completed for the day. For

modeling purposes, it was assumed that watering would occur three times daily, during the construction of this development.

3. **Soil Stabilization.** Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
4. **No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds.
5. **Street Sweeping.** Construction contractors should sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
6. **Architectural Coatings.** Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1, which became effective on January 1, 2022.

4.2 Operational Emissions

Operational emissions for the Project include emissions from electricity consumption (energy sources), vehicle trips (mobile sources), area sources, landscape equipment, and evaporative emissions as the structures are repainted over the life of developments at the Project site. The majority of operational emissions would be associated with vehicle trips to and from the development. Average daily trips (ADTs) from the from the Local Mobility Analysis (Kimley-Horn 2023) were used in the CalEEMod modeling. The first year of operations for the Project will likely be in 2028.

The CalEEMod modeling for operational emissions considered the design conditions listed below:

1. **Architectural coatings.** The use of low-VOC paint (50 g/L for interior and exterior coatings and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1, which became effective on January 1, 2022.
2. **Fireplaces and Woodstoves.** No fireplaces or woodstoves would be installed in the residential units.
3. **Increase Density.** The Project is considered a medium-density residential development (29 to 43 du/acre, City of SD 2020); With the redevelopment of portions of the Project site, the amount of units would increase to 702 units, or 54.2 du/acre. Therefore, the increased density option was applied as 55 dwelling

units per acre.

5.0 PROJECT AIR QUALITY IMPACT ANALYSIS

The development would generate both construction and operational emissions. Initial construction emissions would include emissions associated with the site development and grading of the development. Operational emissions would include emissions from vehicle traffic. The construction and operational impacts are evaluated and compared to significance criteria in this section.

5.1 Conformance to the Regional Air Quality Strategy

The San Diego Association of Regional Government's (SANDAG)'s 2050 Regional Growth Forecast, adopted in December 2021 (SANDAG 2021b) estimates that the City will have 592,143 housing units in 2025 and 676,236 units in 2035, an increase of 84,093 units or about 8,409 units added per year. The proposed Project growth of 262 units is a small fraction of the projected increase in units in the region, and therefore is expected to be consistent with the regional growth plans.

The PBCP is a community plan that covers a few distinct neighborhoods in the City of San Diego, though much of the residential portion of Pacific Beach lacks neighborhood identity (City of SD, 2020). The Project site is located in a multi-family residential area east of the Sail Bay neighborhood and west of the Mission Bay neighborhood within the Crown Point neighborhood, which is the southernmost neighborhood covered by the PBCP. The Project will add a higher-density residential land use with development of smaller units (1,088 SF average for 2-bedroom, and 718 SF average for 1-bedrooms), including affordable units. These infill units are designed at the 30 ft height limit for Coastal Zone Overlay. The Project also provides parking structures and bicycle parking. Since the additional 138 units will increase the population density to 54.2 du/acre, a CPA is needed along with a Rezone from the current designation of RM-3-7 to RM-3-8. Once the CPA and Rezone are done, the Project is expected to be consistent with the PBCP.

Site development would support the overall projected increase in the development potential within the PBCP area, consistent with SANDAG regional growth projections and infill with more affordable housing in the PBCP, with the applicable environmental goals and objectives contained in the General Plan and the PBCP. Any development at the Project site is expected to be required to implement policies, actions, and design guidelines that support General Plan concepts such as increased walkability, enhanced pedestrian and bicycle networks, improved connections to transit, and sustainable development and green building practices. Any development would be consistent with the SDAPCD's regional goals of improving the balance between jobs and housing, and integrating land uses near major transportation corridors such as the I-5 and I-8 freeways. Therefore, the Project would be consistent with the RAQS and SIP.

The impact on regional attainment planning would **be less than significant** under CEQA.

5.2 Conformance to Federal and State Ambient Air Quality Standards

5.2.1 Construction Emissions

Construction of the development at the site would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM₁₀ and PM_{2.5}) from soil disturbance and exhaust emissions (NO_x, CO, and SO₂) from heavy construction vehicles. For the purpose of estimating emissions, it was assumed that the entire 4.3 - acre parcel would be disturbed and developed for overall construction. As noted, construction would generally consist of demolition, site preparation, grading, building construction, paving, and application of architectural coatings (painting).

Site preparation and grading would involve the greatest concentration of heavy equipment use and the highest potential for fugitive dust emissions. Soil needed for cut and fill activities on the site due to site preparation and grading would require import of 1,087 cubic yards of soil. Any development would be required to comply with SDAPCD Rule 55, which identifies fugitive dust standards and is required to be implemented at all construction sites located within the SDAB.

Construction is assumed to be completed by late-2027. Tables 6 shows modeled maximum daily emissions occurring during the construction period at the site, with a comparison of daily impacts to the City of San Diego CEQA screening level thresholds.

TABLE 6 MAXIMUM DAILY CONSTRUCTION EMISSIONS						
lb/day						
Year	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
2024	0.32	3.74	15.7	0.03	2.00	0.97
2025	1.21	7.12	23.5	0.03	2.15	0.97
2026	1.12	6.97	22.9	0.03	2.15	0.59
2027	70.6	6.88	22.4	0.03	2.15	0.58
Screening Threshold (lb/day)	137	250	550	250	100	67
Exceeds Threshold (Yes/No)?	No	No	No	No	No	No

See Appendix B for CalEEMod ver. 2022.1.1.17 computer model output for the daily emissions shown. The higher lb/day value between Winter and Summer results is shown for each pollutant.

Table 7 shows modeled maximum annual impacts of criteria pollutants at the Project site by year throughout the assumed construction period, with a comparison of each year's annual impacts to the City of San Diego CEQA screening level thresholds.

TABLE 7 MAXIMUM ANNUAL CONSTRUCTION EMISSIONS						
tons/year						
Year	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
2024	0.02	0.18	1.17	<0.005	0.08	0.02
2025	0.12	0.74	2.68	<0.005	0.27	0.09
2026	0.14	0.91	2.86	<0.005	0.28	0.08
2027	1.19	0.63	1.98	<0.005	0.19	0.05
Screening Threshold (tons/year)	15	40	100	40	15	10
Exceeds Threshold (Yes/No)?	No	No	No	No	No	No

See Appendix B for CalEEMod ver. 2022.1.1.17 computer model output for the annual emissions shown

All criteria pollutant emissions are below the daily and annual screening level thresholds, as analyzed for each year of construction. As such, air quality impacts from the construction of this development would be **less than significant** under CEQA.

5.2.2 Operational Emissions

Operational emissions would include emissions from electricity consumption (energy sources), vehicle trips (mobile sources), area sources, landscape equipment, and evaporative emissions as the structures are repainted over the life of the development. The majority of operational emissions are associated with vehicle trips to and from the site. Average daily trips (ADTs) from the Local Mobility Analysis (Kimley-Horn 2023) were used in the CalEEMod modeling. Tables 8 and 9 summarize emissions associated with operation of the Project site.

TABLE 8 MAXIMUM DAILY OPERATIONAL EMISSIONS						
(lb/day)						
Category	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Area (Total)	10.4	0.16	18.5	<0.005	0.02	0.02
Energy	0.01	0.25	0.10	<0.005	0.02	0.02
Mobile (Total)	1.97	1.33	13.0	0.03	2.88	0.75
Total	12.4	1.74	31.6	0.03	2.92	0.79
Screening Threshold (lb/day)	137	250	550	250	100	67
Exceeds Threshold (Yes/No)?	No	No	No	No	No	No

See Appendix B for CalEEMod ver. 2022.1.1.17 computer model output. The higher lb/day value between Winter and Summer results is shown for each pollutant.

TABLE 9 MAXIMUM ANNUAL OPERATIONAL EMISSIONS (tons/year)						
Category	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area (Total)	1.67	0.01	1.67	<0.005	<0.005	<0.005
Energy	<0.005	0.05	0.02	<0.005	<0.005	<0.005
Mobile (Total)	0.35	0.24	2.25	0.01	0.52	0.13
Total	2.02	0.30	3.94	0.01	0.53	0.14
Screening Threshold (tons/year)	15	40	100	40	15	10
Exceeds Threshold (Yes/No)?	No	No	No	No	No	No

See Appendix B for CalEEMod ver. 2022.1.1.17 computer Annual model output.

As shown in Tables 8 and 9, the operational emissions associated with this development would not exceed the City of San Diego CEQA screening level thresholds for ROG, NO_x, CO, SO_x, PM₁₀ or PM_{2.5}. Therefore, the scenario's operational air quality impacts (including impacts related to criteria pollutants, sensitive receptors and violations of air quality standards) would be **less than significant** under CEQA.

5.3 Cumulative Impacts

Regarding short-term construction impacts, the SDAPCD thresholds of significance are used to determine whether the Project may have a short-term cumulative impact. As shown in Tables 6 and 7, the Project would not exceed any criteria air pollutant thresholds during construction. Therefore, the scenario would have a less than significant cumulative impact during construction. Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions in the basin to ensure that the SDAB continues to make progress toward NAAQS- and CAAQS-attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the SIP and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and the County as part of the development of their general plans. Therefore, projects that propose development that is consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS and would not be considered to result

in cumulatively considerable impacts from operational emissions. As stated previously, the Project would not result in significant regional growth that is not accounted for within the RAQS. As a result, the development would not result in a cumulatively considerable contribution to pollutant emissions and would result in a **less than significant** impact under CEQA.

5.4 Impacts to Sensitive Receptors

Based on a desktop review of the Project vicinity, the adjacent sensitive receptors are the residents of multi-family and single family houses located within and adjacent to the Project site, and an elementary school north of the Project site.

Due to the short-term construction duration and the limited construction emissions, there is low potential for fugitive dust or DPM due to construction activities to impact sensitive receptors. Construction equipment will consist of Tier 4 Final equipment (the most recent engine emissions standard implemented by the USEPA), which will further reduce the potential for impact of construction DPM emissions on sensitive receptors. The scenario's total construction DPM emissions are not of a magnitude and duration that could create substantial concentrations or significant air toxic risks to the nearest sensitive receptors during construction. Compliance with the SDAPCD rules and regulations would reduce the fugitive dust emissions during construction and associated impacts to sensitive receptors. Demolition of the existing parking lots and amenities on the Project site would be completed in compliance with City ordinances and SDAPCD rules so that any lead-based paint that may be present will be properly removed and disposed of, thereby having no impact on nearby sensitive receptors.

The operating emissions from sources (such as mobile sources) would be negligible and would not have the potential to impact sensitive receptors. Therefore, the development's construction and operation air pollutant emissions would not expose sensitive receptors to substantial pollutant concentrations and would result in a **less than significant** impact under CEQA.

5.5 Objectionable Odors

Construction of the Project at the site would involve the use of diesel-powered construction equipment. Diesel exhaust odors may be noticeable temporarily at adjacent properties; however, construction activities would be temporary and are not considered significant. The proposed future residential land use designation of the site would not include industrial or agricultural uses that are typically associated with objectionable odors. Therefore, impacts associated with objectionable odors would be **less than significant** under CEQA.

5.6 Air Contaminant Emissions

As demonstrated in Tables 6, 7, 8, and 9 in Section 5.2, neither the construction nor the operation of the Project would result in substantial quantities of air contaminants being emitted beyond the boundaries of the premises. Because residential land uses are not considered stationary sources of air contaminants, and because the proposed future residential land use designation of the site is in keeping with the land use designations

of adjacent properties, the Project would not add substantial quantities of air contaminants beyond the existing land use quantities into the region. Therefore, impacts associated with air contaminant emissions beyond the boundaries of the premises would be **less than significant** under CEQA.

6.0 CONCLUSIONS

The proposed Project will be consistent with the growth forecasts of the PBCP and the City of San Diego General Plan, and therefore will be consistent with the RAQS. Assuming the buildout of the residential units and parking structures at the Project site, the air quality impact analysis demonstrates that short-term emissions from construction of the development would not exceed the City's air quality thresholds. Operational emissions include emissions from electricity consumption (energy sources), vehicle trips (mobile sources), area sources such as landscape equipment, and architectural coating emissions. The majority of operational emissions are associated with vehicle trips to and from the Project site. The emissions due to the proposed Project would not exceed the SDAPCD thresholds for the criteria pollutants evaluated, nor would the impact be cumulatively considerable. The Project would not cause substantial concentration impacts to sensitive receptors, nor objectionable odors to large numbers of persons. The development will also be consistent with the regional and community plans. For these reasons, this study finds that the Project air quality impacts will be **less than significant**.

7.0 REFERENCES

CalEPA 1998. *Findings of the Scientific Review Panel on The Report on Diesel Exhaust*, California Environmental Protection Agency (CalEPA), Office of Environmental Health Hazard Assessment (OEHHA), as adopted at the Panel's April 22, 1998, meeting.

CAPCOA 2022. California Emission Estimator Model (CalEEMod) Users Guide, California Air Pollution Control Officers Association, April 2022. Available online at: www.caleemod.com/

CARB 2000. *Diesel Risk Reduction Plan*, California Air Resources Board, September 2000. Available at: ww2.arb.ca.gov/our-work/programs/diesel-risk-reduction-plan

CARB 2023a. *Overview: Diesel Exhaust & Health*, CARB, Accessed August 2023. Available at: ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health

CARB 2023b. iADAM Air Quality Data Statistics, CARB, Accessed August, 2023 Available at: www.arb.ca.gov/adam/topfour/topfour1.php

City of SD 2008a. San Diego Municipal Code, Chapter 5, Article 4, Division 10, Lead Hazard Prevention and Control Ordinance, April 8, 2008. Available at: <https://www.sandiego.gov/sites/default/files/legacy/environmental-services/pdf/ep/081017leadord.pdf>

City of SD 2008b. City of San Diego General Plan, City of San Diego, March 10, 2008. Available at: <https://www.sandiego.gov/planning/work/general-plan#genplan>

City of SD 2010. San Diego Municipal Code, Chapter 14, Article 2, Division 7, Section 142.0710, Air Contaminant Regulations, January 1, 2010. Available at: docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Art02Division07.pdf

City of SD 2020. *Pacific Beach Community Plan*, City of San Diego, February 2020. Available at: https://www.sandiego.gov/sites/default/files/pacific_beach_community_plan_february_2020_0.pdf

City of SD 2022. *California Environmental Quality Act Significance Determination Thresholds*, City of San Diego, September 2022. Available at: https://www.sandiego.gov/sites/default/files/september_2022_ceqa_thresholds_final.pdf

Kimley-Horn 2023. *Avalon Bay Local Mobility Analysis*, Kimley-Horn, February 2023.

SANDAG 2021a. *San Diego Forward: The Regional Plan*, SANDAG, December 2021. Available at:

<https://www.sandag.org/regional-plan/2021-regional-plan>

SANDAG 2021b. *Series 14: 2050 Regional Growth Forecast*, San Diego Association of Governments, December 2, 2021. Available at:

[https://gis.sandag.org/docs/Series%2014 Regional Growth Forecast and Baseline Subregional Allocation.pdf](https://gis.sandag.org/docs/Series%2014%20Regional%20Growth%20Forecast%20and%20Baseline%20Subregional%20Allocation.pdf)

SANDAG 2022. *2023 Regional Transportation Improvement Program*, SANDAG, September 23, 2022. Available at:

<https://www.sandag.org/-/media/SANDAG/Documents/PDF/funding/funding-and-programming/regional-transportation-improvement-program/final-2023-rtip-2022-11-30.pdf>

SDAPCD 1976. SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance, SDAPCD, November 8, 1976. Available at:

<https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-51.pdf>

SDAPCD 2005. *Measures to Reduce Particulate Matter in San Diego County*, SDAPCD, December 2005. Available at:

<https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/PM-Measures.pdf>

SDAPCD 2009a. *2009 Regional Air Quality Strategy Revision*. SDAPCD, April 22, 2009. Available at:

<https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/2009-RAQS.pdf>

SDAPCD 2009b. SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust. SDAPCD, June 24, 2009. Available at:

<https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-55.pdf>

SDAPCD 2023. *2022 Revision of the Regional Air Quality Strategy for San Diego County*, SDAPCD, March 2023. Available at:

<https://www.sdapcd.org/content/sdapcd/planning.html>

SDAPCD 2017. SDAPCD Regulation XII: Toxic Air Contaminants; Rule 1206: Asbestos Removal, SDAPCD, November 15, 2017. Available at:

<https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-1206.pdf>

SDAPCD 2020a. *2020 Plan for Attaining the NAAQS for Ozone in San Diego County*, SDAPCD, Updated October 2020. Available at:

[https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/Att%20A%20\(Attainment%20Plan\)_ws.pdf](https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/Att%20A%20(Attainment%20Plan)_ws.pdf)

SDAPCD 2020b. SDAPCD Regulation II: Permits; Rule 20.2: New Source Review – Non-Major Sources, SDAPCD, Adopted June 26, 2019, Effective October 16, 2020. Available at:

<https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-20.2.pdf>

SDAPCD 2021b. SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: Architectural Coatings. SDAPCD, Effective January 1, 2022. Available at:

<https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-67.0.1-eff010122.pdf>

SDAPCD 2023a. SDAPCD 5-Year Air Quality Summary Annual Report (2018 – 2022). Available at:

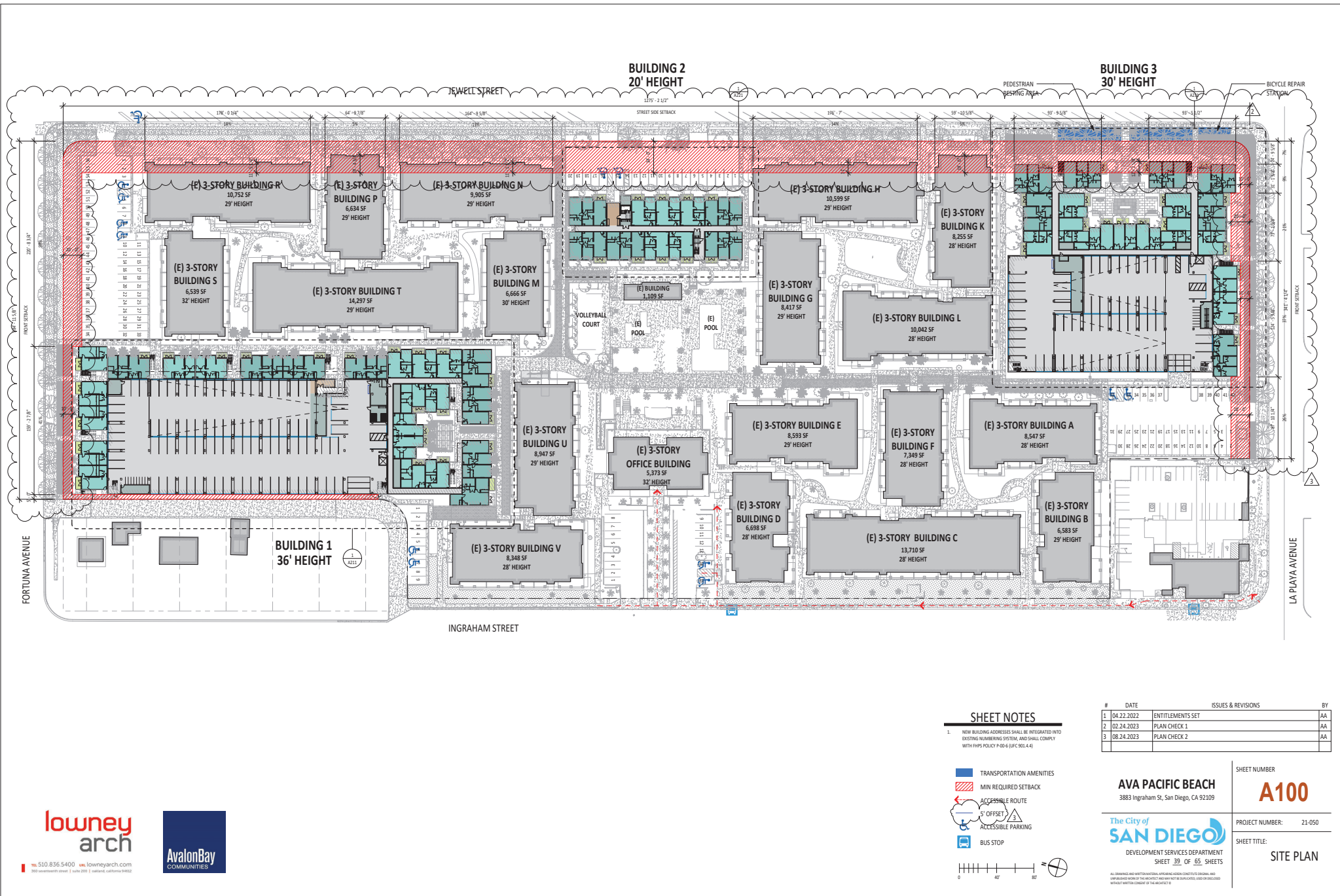
<https://www.sdapcd.org/content/dam/sdapcd/documents/monitoring/5-Year-Air-Quality.pdf>

SDAPCD 2023b San Diego County Attainment Status, SDAPCD, Accessed August 2023. Available at:

<https://www.sdapcd.org/content/sdapcd/planning/attainment-status.html>

APPENDIX A

SITE PLAN AND PROJECT INFORMATION



APPENDIX B

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AVA Pacific Beach Custom Report

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5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	AVA Pacific Beach
Construction Start Date	6/3/2024
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	19.0
Location	3883 Ingraham St, San Diego, CA 92109, USA
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6310
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
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
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Apartments Mid Rise	138	Dwelling Unit	0.90	344,437	34,006	—	385	—
Enclosed Parking with Elevator	614	Space	1.49	245,600	0.00	—	—	—
Parking Lot	20.0	Space	0.18	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Transportation	T-1	Increase Residential Density
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-34*	Provide Bike Parking

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.49	70.7	17.0	22.1	0.03	0.69	2.06	2.60	0.64	0.92	1.51
Mit.	1.36	70.6	6.98	23.5	0.03	0.09	2.06	2.15	0.09	0.92	0.97
% Reduced	45%	< 0.5%	59%	-6%	—	87%	—	17%	86%	—	36%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.48	70.7	16.1	20.9	0.03	0.75	2.06	2.70	0.69	0.92	1.60
Mit.	1.35	70.6	7.12	22.4	0.03	0.09	2.06	2.15	0.09	0.92	0.97
% Reduced	46%	< 0.5%	56%	-7%	—	88%	—	20%	87%	—	40%

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.65	6.94	9.60	14.6	0.02	0.34	1.46	1.78	0.32	0.43	0.74
Mit.	0.89	6.53	4.97	15.6	0.02	0.06	1.46	1.52	0.06	0.43	0.48
% Reduced	46%	6%	48%	-7%	—	81%	—	15%	80%	—	35%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	1.27	1.75	2.66	< 0.005	0.06	0.27	0.33	0.06	0.08	0.14
Mit.	0.16	1.19	0.91	2.86	< 0.005	0.01	0.27	0.28	0.01	0.08	0.09
% Reduced	46%	6%	48%	-7%	—	81%	—	15%	80%	—	35%

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2024	2.06	1.69	17.0	17.2	0.03	0.69	1.17	1.87	0.64	0.22	0.86
2025	2.49	2.11	14.2	22.1	0.03	0.65	2.06	2.60	0.59	0.92	1.51
2026	2.37	1.96	12.4	21.3	0.03	0.38	2.06	2.44	0.35	0.50	0.85
2027	2.23	70.7	11.9	20.8	0.03	0.34	2.06	2.40	0.31	0.50	0.81
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2024	2.02	1.69	16.1	15.9	0.03	0.75	1.96	2.70	0.69	0.92	1.60
2025	2.48	2.09	14.3	20.9	0.03	0.65	2.06	2.60	0.59	0.92	1.51
2026	2.31	1.95	12.6	20.3	0.03	0.38	2.06	2.44	0.35	0.50	0.85
2027	2.22	70.7	12.0	19.8	0.03	0.34	2.06	2.40	0.31	0.50	0.81
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2024	0.77	0.64	6.26	6.09	0.01	0.27	0.41	0.67	0.24	0.10	0.35
2025	1.65	1.39	9.60	13.9	0.02	0.34	1.44	1.78	0.32	0.43	0.74

2026	1.65	1.38	8.95	14.6	0.02	0.27	1.46	1.73	0.25	0.35	0.60
2027	1.12	6.94	6.09	10.1	0.02	0.17	1.01	1.19	0.16	0.24	0.41
Annual	—	—	—	—	—	—	—	—	—	—	—
2024	0.14	0.12	1.14	1.11	< 0.005	0.05	0.07	0.12	0.04	0.02	0.06
2025	0.30	0.25	1.75	2.54	< 0.005	0.06	0.26	0.33	0.06	0.08	0.14
2026	0.30	0.25	1.63	2.66	< 0.005	0.05	0.27	0.32	0.05	0.06	0.11
2027	0.20	1.27	1.11	1.85	< 0.005	0.03	0.18	0.22	0.03	0.04	0.07

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2024	0.39	0.32	3.74	15.7	0.03	0.07	1.17	1.24	0.07	0.22	0.29
2025	1.36	1.21	6.98	23.5	0.03	0.09	2.06	2.15	0.09	0.92	0.97
2026	1.32	1.12	6.83	22.9	0.03	0.09	2.06	2.15	0.09	0.50	0.59
2027	1.24	70.6	6.69	22.4	0.03	0.09	2.06	2.15	0.09	0.50	0.58
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2024	0.29	0.29	1.40	15.4	0.03	0.05	1.96	2.00	0.05	0.92	0.97
2025	1.35	1.19	7.12	22.4	0.03	0.09	2.06	2.15	0.09	0.92	0.97
2026	1.26	1.10	6.97	21.8	0.03	0.09	2.06	2.15	0.09	0.50	0.59
2027	1.22	70.6	6.88	21.4	0.03	0.09	2.06	2.15	0.09	0.50	0.58
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2024	0.14	0.13	1.01	6.40	0.01	0.02	0.41	0.43	0.02	0.10	0.13
2025	0.77	0.68	4.05	14.7	0.02	0.06	1.44	1.50	0.06	0.43	0.48
2026	0.89	0.78	4.97	15.6	0.02	0.06	1.46	1.52	0.06	0.35	0.41
2027	0.61	6.53	3.45	10.9	0.02	0.04	1.01	1.06	0.04	0.24	0.29

Annual	—	—	—	—	—	—	—	—	—	—	—
2024	0.03	0.02	0.18	1.17	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02
2025	0.14	0.12	0.74	2.68	< 0.005	0.01	0.26	0.27	0.01	0.08	0.09
2026	0.16	0.14	0.91	2.86	< 0.005	0.01	0.27	0.28	0.01	0.06	0.08
2027	0.11	1.19	0.63	1.98	< 0.005	0.01	0.18	0.19	0.01	0.04	0.05

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.68	13.2	2.14	37.2	0.05	0.08	4.08	4.16	0.07	1.04	1.10
Mit.	4.77	12.4	1.62	31.6	0.03	0.07	2.86	2.92	0.06	0.72	0.78
% Reduced	16%	6%	24%	15%	28%	13%	30%	30%	14%	30%	29%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.01	10.7	2.14	17.8	0.04	0.05	4.08	4.13	0.05	1.04	1.09
Mit.	2.12	9.92	1.57	12.5	0.03	0.04	2.86	2.90	0.04	0.72	0.77
% Reduced	30%	8%	27%	30%	29%	19%	30%	30%	18%	30%	29%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.27	11.9	2.20	26.9	0.05	0.06	4.03	4.10	0.06	1.02	1.08
Mit.	3.38	11.1	1.64	21.6	0.03	0.05	2.82	2.88	0.05	0.72	0.77
% Reduced	21%	7%	26%	20%	29%	15%	30%	30%	16%	30%	29%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.78	2.17	0.40	4.91	0.01	0.01	0.74	0.75	0.01	0.19	0.20
Mit.	0.62	2.02	0.30	3.94	0.01	0.01	0.52	0.53	0.01	0.13	0.14
% Reduced	21%	7%	26%	20%	29%	15%	30%	30%	16%	30%	29%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.03	2.81	1.72	18.6	0.05	0.03	4.08	4.12	0.03	1.04	1.07
Area	2.62	10.4	0.16	18.5	< 0.005	0.02	—	0.02	0.02	—	0.02
Energy	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	5.68	13.2	2.14	37.2	0.05	0.08	4.08	4.16	0.07	1.04	1.10
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.98	2.75	1.89	17.7	0.04	0.03	4.08	4.12	0.03	1.04	1.07
Area	—	7.97	—	—	—	—	—	—	—	—	—
Energy	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	3.01	10.7	2.14	17.8	0.04	0.05	4.08	4.13	0.05	1.04	1.09
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.95	2.72	1.87	17.6	0.04	0.03	4.03	4.07	0.03	1.02	1.05
Area	1.29	9.18	0.08	9.14	< 0.005	0.01	—	0.01	0.01	—	0.01
Energy	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—

Total	4.27	11.9	2.20	26.9	0.05	0.06	4.03	4.10	0.06	1.02	1.08
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.54	0.50	0.34	3.22	0.01	0.01	0.74	0.74	0.01	0.19	0.19
Area	0.24	1.67	0.01	1.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	0.78	2.17	0.40	4.91	0.01	0.01	0.74	0.75	0.01	0.19	0.20

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.12	1.97	1.21	13.0	0.03	0.02	2.86	2.88	0.02	0.72	0.75
Area	2.62	10.4	0.16	18.5	< 0.005	0.02	—	0.02	0.02	—	0.02
Energy	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	4.77	12.4	1.62	31.6	0.03	0.07	2.86	2.92	0.06	0.72	0.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.09	1.93	1.33	12.4	0.03	0.02	2.86	2.88	0.02	0.72	0.75
Area	—	7.97	—	—	—	—	—	—	—	—	—
Energy	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—	—

Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	2.12	9.92	1.57	12.5	0.03	0.04	2.86	2.90	0.04	0.72	0.77
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.06	1.90	1.31	12.3	0.03	0.02	2.82	2.85	0.02	0.72	0.74
Area	1.29	9.18	0.08	9.14	< 0.005	0.01	—	0.01	0.01	—	0.01
Energy	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	3.38	11.1	1.64	21.6	0.03	0.05	2.82	2.88	0.05	0.72	0.77
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.38	0.35	0.24	2.25	0.01	< 0.005	0.52	0.52	< 0.005	0.13	0.13
Area	0.24	1.67	0.01	1.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Water	—	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—	—
Total	0.62	2.02	0.30	3.94	0.01	0.01	0.52	0.53	0.01	0.13	0.14

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62
Demolition	—	—	—	—	—	—	0.80	0.80	—	0.12	0.12
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.82	2.90	< 0.005	0.12	—	0.12	0.11	—	0.11
Demolition	—	—	—	—	—	—	0.14	0.14	—	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.51	0.53	< 0.005	0.02	—	0.02	0.02	—	0.02
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.62	0.00	0.00	0.11	0.11	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	0.00
Hauling	0.08	0.02	1.43	0.51	0.01	0.02	0.27	0.29	0.02	0.07	0.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	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	0.00
Hauling	0.01	< 0.005	0.27	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	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	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	2.27	14.6	0.02	0.05	—	0.05	0.05	—	0.05
Demolition	—	—	—	—	—	—	0.80	0.80	—	0.12	0.12
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.41	2.63	< 0.005	0.01	—	0.01	0.01	—	0.01
Demolition	—	—	—	—	—	—	0.14	0.14	—	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.62	0.00	0.00	0.11	0.11	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	0.00
Hauling	0.08	0.02	1.43	0.51	0.01	0.02	0.27	0.29	0.02	0.07	0.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	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	0.00
Hauling	0.01	< 0.005	0.27	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	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	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005

3.3. Site Preparation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.56	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	2.25	2.04	< 0.005	0.10	—	0.10	0.09	—	0.09
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.37	< 0.005	0.02	—	0.02	0.02	—	0.02
Dust From Material Movement	—	—	—	—	—	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.06	0.06	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.32	0.00	0.00	0.06	0.06	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	< 0.005	0.06	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.26	1.33	15.0	0.03	0.05	—	0.05	0.05	—	0.05
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.26	1.33	15.0	0.03	0.05	—	0.05	0.05	—	0.05
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.05	0.24	2.68	< 0.005	0.01	—	0.01	0.01	—	0.01
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.49	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Dust From Material Movement	—	—	—	—	—	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.06	0.06	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.32	0.00	0.00	0.06	0.06	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.90	0.87	< 0.005	0.04	—	0.04	0.04	—	0.04
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.43	0.00	0.00	0.08	0.08	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	0.00
Hauling	0.01	< 0.005	0.16	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	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	0.00
Hauling	< 0.005	< 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	< 0.005	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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.6. Grading (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.20	14.2	0.02	0.05	—	0.05	0.05	—	0.05
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.43	0.00	0.00	0.08	0.08	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	0.00
Hauling	0.01	< 0.005	0.16	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	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	0.00
Hauling	< 0.005	< 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	< 0.005	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	0.00

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
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3.7. Grading (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.53	2.61	< 0.005	0.12	—	0.12	0.11	—	0.11
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.16	0.16
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.46	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02

Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.46	0.00	0.00	0.08	0.08	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	0.00
Hauling	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.41	0.00	0.00	0.08	0.08	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	0.00
Hauling	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	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	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.8. Grading (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.20	14.2	0.02	0.05	—	0.05	0.05	—	0.05
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.20	14.2	0.02	0.05	—	0.05	0.05	—	0.05
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.56	< 0.005	0.01	—	0.01	0.01	—	0.01
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.16	0.16
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.04	0.03	0.46	0.00	0.00	0.08	0.08	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	0.00
Hauling	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.41	0.00	0.00	0.08	0.08	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	0.00
Hauling	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	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	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.9. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.66	5.66	6.33	0.01	0.22	—	0.22	0.20	—	0.20
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.03	1.16	< 0.005	0.04	—	0.04	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.82	0.62	9.38	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.12	0.06	1.83	0.85	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.80	0.69	8.21	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.12	0.05	1.90	0.88	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.42	0.37	4.45	0.00	0.00	0.90	0.90	0.00	0.21	0.21
Vendor	0.06	0.03	1.01	0.46	< 0.005	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.81	0.00	0.00	0.16	0.16	0.00	0.04	0.04
Vendor	0.01	0.01	0.18	0.08	< 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	0.00
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3.10. Building Construction (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.34	4.53	13.3	0.02	0.07	—	0.07	0.07	—	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.34	4.53	13.3	0.02	0.07	—	0.07	0.07	—	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.18	2.42	7.10	0.01	0.04	—	0.04	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.44	1.30	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.82	0.62	9.38	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.12	0.06	1.83	0.85	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.80	0.69	8.21	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.12	0.05	1.90	0.88	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.42	0.37	4.45	0.00	0.00	0.90	0.90	0.00	0.21	0.21
Vendor	0.06	0.03	1.01	0.46	< 0.005	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.81	0.00	0.00	0.16	0.16	0.00	0.04	0.04
Vendor	0.01	0.01	0.18	0.08	< 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	0.00

3.11. Building Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.01	0.84	7.22	8.40	0.02	0.26	—	0.26	0.24	—	0.24
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.32	1.53	< 0.005	0.05	—	0.05	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.73	0.56	8.75	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.11	0.05	1.74	0.82	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.72	0.63	7.72	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.10	0.04	1.81	0.83	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.45	5.57	0.00	0.00	1.21	1.21	0.00	0.28	0.28
Vendor	0.08	0.03	1.28	0.59	0.01	0.01	0.25	0.26	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.02	0.00	0.00	0.22	0.22	0.00	0.05	0.05
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 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	0.00

3.12. Building Construction (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.34	4.53	13.3	0.02	0.07	—	0.07	0.07	—	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.34	4.53	13.3	0.02	0.07	—	0.07	0.07	—	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.24	3.23	9.49	0.02	0.05	—	0.05	0.05	—	0.05
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.59	1.73	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.73	0.56	8.75	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.11	0.05	1.74	0.82	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.72	0.63	7.72	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.10	0.04	1.81	0.83	0.01	0.02	0.35	0.37	0.02	0.10	0.12

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.45	5.57	0.00	0.00	1.21	1.21	0.00	0.28	0.28
Vendor	0.08	0.03	1.28	0.59	0.01	0.01	0.25	0.26	0.01	0.07	0.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.02	0.00	0.00	0.22	0.22	0.00	0.05	0.05
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 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	0.00

3.13. Building Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.65	5.61	0.01	0.15	—	0.15	0.14	—	0.14
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	0.10	0.85	1.02	< 0.005	0.03	—	0.03	0.03	—	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.71	0.50	8.30	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.10	0.05	1.67	0.79	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.70	0.62	7.29	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.09	0.04	1.73	0.80	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.33	0.30	3.54	0.00	0.00	0.81	0.81	0.00	0.19	0.19
Vendor	0.05	0.02	0.82	0.38	< 0.005	0.01	0.17	0.18	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.65	0.00	0.00	0.15	0.15	0.00	0.03	0.03
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	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	0.00

3.14. Building Construction (2027) - Mitigated

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

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

Off-Road Equipment	0.36	0.34	4.53	13.3	0.02	0.07	—	0.07	0.07	—	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.34	4.53	13.3	0.02	0.07	—	0.07	0.07	—	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.16	2.17	6.37	0.01	0.03	—	0.03	0.03	—	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.40	1.16	< 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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.71	0.50	8.30	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.10	0.05	1.67	0.79	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.70	0.62	7.29	0.00	0.00	1.71	1.71	0.00	0.40	0.40
Vendor	0.09	0.04	1.73	0.80	0.01	0.02	0.35	0.37	0.02	0.10	0.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.33	0.30	3.54	0.00	0.00	0.81	0.81	0.00	0.19	0.19
Vendor	0.05	0.02	0.82	0.38	< 0.005	0.01	0.17	0.18	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.65	0.00	0.00	0.15	0.15	0.00	0.03	0.03
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	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	0.00

3.15. Paving (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.65	5.74	8.20	0.01	0.23	—	0.23	0.21	—	0.21
Paving	—	0.29	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01
Paving	—	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.61	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.18	2.19	8.64	0.01	0.04	—	0.04	0.04	—	0.04
Paving	—	0.29	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.09	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Paving	—	0.01	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.61	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.17. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
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Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	—	70.4	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	—	70.4	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	—	5.98	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	—	1.09	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.10	1.66	0.00	0.00	0.34	0.34	0.00	0.08	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.12	1.46	0.00	0.00	0.34	0.34	0.00	0.08	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.18. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	—	70.4	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	—	70.4	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	—	5.98	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	—	1.09	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.10	1.66	0.00	0.00	0.34	0.34	0.00	0.08	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.12	1.46	0.00	0.00	0.34	0.34	0.00	0.08	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.03	2.81	1.72	18.6	0.05	0.03	4.08	4.12	0.03	1.04	1.07
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.03	2.81	1.72	18.6	0.05	0.03	4.08	4.12	0.03	1.04	1.07
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.98	2.75	1.89	17.7	0.04	0.03	4.08	4.12	0.03	1.04	1.07
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.98	2.75	1.89	17.7	0.04	0.03	4.08	4.12	0.03	1.04	1.07
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.54	0.50	0.34	3.22	0.01	0.01	0.74	0.74	0.01	0.19	0.19
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.54	0.50	0.34	3.22	0.01	0.01	0.74	0.74	0.01	0.19	0.19

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.12	1.97	1.21	13.0	0.03	0.02	2.86	2.88	0.02	0.72	0.75
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.12	1.97	1.21	13.0	0.03	0.02	2.86	2.88	0.02	0.72	0.75
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.09	1.93	1.33	12.4	0.03	0.02	2.86	2.88	0.02	0.72	0.75
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total	2.09	1.93	1.33	12.4	0.03	0.02	2.86	2.88	0.02	0.72	0.75
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.38	0.35	0.24	2.25	0.01	< 0.005	0.52	0.52	< 0.005	0.13	0.13
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.38	0.35	0.24	2.25	0.01	< 0.005	0.52	0.52	< 0.005	0.13	0.13

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.01	0.25	0.10	< 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	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.01	0.25	0.10	< 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	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	0.01	< 0.005	0.05	0.02	< 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	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.01	0.25	0.10	< 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	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.01	0.25	0.10	< 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	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.03	0.01	0.25	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	< 0.005	0.05	0.02	< 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	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.05	0.02	< 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	7.38	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.60	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.62	2.44	0.16	18.5	< 0.005	0.02	—	0.02	0.02	—	0.02
Total	2.62	10.4	0.16	18.5	< 0.005	0.02	—	0.02	0.02	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	7.38	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.60	—	—	—	—	—	—	—	—	—
Total	—	7.97	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.35	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.11	—	—	—	—	—	—	—	—	—

Landscape Equipment	0.24	0.22	0.01	1.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	0.24	1.67	0.01	1.67	< 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	7.38	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.60	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.62	2.44	0.16	18.5	< 0.005	0.02	—	0.02	0.02	—	0.02
Total	2.62	10.4	0.16	18.5	< 0.005	0.02	—	0.02	0.02	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	7.38	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.60	—	—	—	—	—	—	—	—	—
Total	—	7.97	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.35	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.11	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.24	0.22	0.01	1.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	0.24	1.67	0.01	1.67	< 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—
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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	6/3/2024	9/2/2024	5.00	66.0	—
Site Preparation	Site Preparation	9/3/2024	12/2/2024	5.00	65.0	—
Grading	Grading	12/3/2024	4/2/2025	5.00	87.0	—
Building Construction	Building Construction	4/3/2025	9/2/2027	5.00	631	—
Paving	Paving	9/3/2027	9/23/2027	5.00	15.0	—
Architectural Coating	Architectural Coating	9/24/2027	11/5/2027	5.00	31.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

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

Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Tier 4 Final	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Tractors/Loaders/Backh	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	14.4	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT

Grading	Hauling	1.56	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	203	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	55.0	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	40.5	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	14.4	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	12.0	LDA,LDT1,LDT2

Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT
Grading	Hauling	1.56	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	203	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	55.0	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	40.5	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	697,485	232,495	2,921	325	4,365

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	3,805	—
Site Preparation	—	—	97.5	0.00	—
Grading	1,087	—	87.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.67

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Enclosed Parking with Elevator	1.49	100%

Parking Lot	0.18	100%
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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	589	0.03	< 0.005
2025	0.00	589	0.03	< 0.005
2026	0.00	589	0.03	< 0.005
2027	0.00	589	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
Apartments Mid Rise	787	787	787	287,109	5,780	5,780	5,780	2,109,602
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
Apartments Mid Rise	551	551	551	200,976	4,046	4,046	4,046	1,476,722
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
697484.9249999999	232,495	2,921	325	4,365

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	467,940	589	0.0330	0.0040	976,824
Enclosed Parking with Elevator	906,616	589	0.0330	0.0040	0.00

Parking Lot	6,869	589	0.0330	0.0040	0.00
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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	467,940	589	0.0330	0.0040	976,824
Enclosed Parking with Elevator	906,616	589	0.0330	0.0040	0.00
Parking Lot	6,869	589	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	4,848,364	1,009,568
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	4,848,364	1,009,568
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
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Apartments Mid Rise	102	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	102	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

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

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

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
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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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
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5.16.2. Process Boilers

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

Equipment Type	Fuel Type
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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
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

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

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	7.67	annual days of extreme heat

Extreme Precipitation	2.70	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	1.93	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 $\frac{3}{4}$ 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	N/A	N/A	N/A	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	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 include implementation of 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	35.2
AQ-PM	47.8
AQ-DPM	21.1
Drinking Water	29.0
Lead Risk Housing	24.8
Pesticides	0.00
Toxic Releases	34.7
Traffic	31.6

Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	11.1
Impaired Water Bodies	51.2
Solid Waste	0.00
Sensitive Population	—
Asthma	6.42
Cardio-vascular	13.0
Low Birth Weights	0.90
Socioeconomic Factor Indicators	—
Education	10.8
Housing	81.9
Linguistic	31.3
Poverty	33.8
Unemployment	8.69

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	56.93571154
Employed	94.72603619
Median HI	43.60323367
Education	—
Bachelor's or higher	83.38252278
High school enrollment	100

Preschool enrollment	77.6337739
Transportation	—
Auto Access	92.6344155
Active commuting	77.18465289
Social	—
2-parent households	63.06942128
Voting	53.07327088
Neighborhood	—
Alcohol availability	29.66765046
Park access	81.35506224
Retail density	33.47876299
Supermarket access	36.64827409
Tree canopy	12.61388426
Housing	—
Homeownership	13.48646221
Housing habitability	30.71987681
Low-inc homeowner severe housing cost burden	6.73681509
Low-inc renter severe housing cost burden	46.10547928
Uncrowded housing	96.93314513
Health Outcomes	—
Insured adults	43.11561658
Arthritis	97.1
Asthma ER Admissions	88.6
High Blood Pressure	98.5
Cancer (excluding skin)	77.2
Asthma	58.2
Coronary Heart Disease	96.5

Chronic Obstructive Pulmonary Disease	91.4
Diagnosed Diabetes	98.6
Life Expectancy at Birth	57.3
Cognitively Disabled	94.6
Physically Disabled	91.7
Heart Attack ER Admissions	83.4
Mental Health Not Good	61.1
Chronic Kidney Disease	98.0
Obesity	83.6
Pedestrian Injuries	57.5
Physical Health Not Good	95.9
Stroke	96.9
Health Risk Behaviors	—
Binge Drinking	0.4
Current Smoker	56.8
No Leisure Time for Physical Activity	93.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	93.4
Elderly	80.0
English Speaking	95.7
Foreign-born	12.5
Outdoor Workers	83.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	6.3
Traffic Density	41.7

Traffic Access	55.3
Other Indices	—
Hardship	5.4
Other Decision Support	—
2016 Voting	70.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	4.00
Healthy Places Index Score for Project Location (b)	75.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Parking acreage estimated from site plans; remaining lot acreage assigned to residential. Landscape area from site plans.

Construction: Construction Phases	Construction schedule provided by client; assumed all development occurring in one phase. Site preparation not listed separately; split demo and remediation into 3 months each.
Construction: Off-Road Equipment	No equipment specified by client; CalEEMod default equipment mix. Client states all equipment will be Tier 4 w/ DEF.
Operations: Vehicle Data	787 trips per day from LMA (Kimley Horn, 02/2023)
Operations: Hearths	No fireplaces per client.
Operations: Water and Waste Water	Outdoor water use from ETWU in plan set, dated 2/24/23