

APPENDIX C

Air Quality and Greenhouse Gas

Technical Report



Air Quality & Greenhouse Gas Technical Report

Cypress Point Affordable Housing Community Project

San Mateo County, California

June 2023

PREPARED FOR

MidPen Housing Corporation

PREPARED BY

SWCA Environmental Consultants

**AIR QUALITY & GREENHOUSE GAS
TECHNICAL REPORT
CYPRESS POINT
AFFORDABLE HOUSING COMMUNITY PROJECT
SAN MATEO COUNTY, CALIFORNIA**

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ACRONYMS AND ABBREVIATIONS

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
Air Basin	Mountain County Air Basin
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emission Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	California Action Team
CCAA	California Clean Air Act
CCAP	Alameda County General Plan Community Climate Action Plan
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
County	County of San Mateo
County General Plan	County of San Mateo General Plan
DPM	diesel particulate matter
EO	Executive Order
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gas
GWP	global warming potential
H ₂ S	hydrogen sulfide
HFCs	hydrofluorocarbons
HRA	health risk assessment

HVAC	heating, ventilation, and air conditioning
IPCC	Intergovernmental Panel on Climate Change
IWMA	Integrated Waste Management Act
LCFS	Low Carbon Fuel Standard
MMT	million metric tons
MT	metric tons
MTC	Metropolitan Transportation Commission
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHTSA	National Highway Traffic Safety Administration
NO ₂	nitrogen dioxide
NO _x	oxides of nitrogen
O ₃	ozone
OEHHA	California Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
PFCs	perfluorocarbons
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
ppb	parts per billion
ppm	parts per million
project	Cypress Point Affordable Housing Community Project
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
SB	Senate Bill
SCOTUS	Supreme Court of the United States
SCS	Sustainable Community Strategy
SF ₆	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SRA	source receptor area
TAC	toxic air contaminant
TSCA	Toxic Substances Control Act
VMT	vehicle miles traveled
VOC	volatile organic compound
ZEV	Zero Emission Vehicle

1 INTRODUCTION

MidPen Housing Corporation (MidPen) retained SWCA Environmental Consultants (SWCA) to conduct an air quality and greenhouse gas emissions (GHGs) technical report to supplement and update the Illingworth and Rodkin, Inc 2018 *Cypress Point Affordable Housing Project Air Quality and Greenhouse Gas Emissions Assessment* in support of the proposed Cypress Point Affordable Housing Community Project (project) in San Mateo County, California (county). The project is an affordable housing development located within the unincorporated community of Moss Beach in the County of San Mateo, designed to provide affordable housing in the San Mateo Midcoast region. The intention of the project sponsors and San Mateo County is to improve the jobs/housing balance and jobs/housing fit by providing preference for those who live or work on the San Mateo Coast.

In 2018, Illingworth and Rodkin, Inc assessed the project's emissions in the 2018 *Cypress Point Affordable Housing Project Air Quality and Greenhouse Gas Emissions Assessment* (Illingworth and Rodkin, Inc 2018) (Appendix A). The purpose of this report is to describe the methodologies used to quantify project air pollutant and greenhouse gas (GHG) emissions and to evaluate the air quality and GHG emissions impacts on ambient air quality & GHGs associated with the project utilizing updated project details and the current emission estimator model. This air quality technical report also addresses the consistency of the project with current applicable federal, state, and local regulatory policies pertaining to air quality and GHG emissions, and analysis of whether the project would cause an exceedance of an ambient air quality standard or significance threshold. The 2018 Illingworth and Rodkin, Inc assessment (2018 Report) will be referenced throughout, where applicable.

The evaluation of project impacts was conducted as recommended in the Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act (CEQA) Guidelines dated May 2017 (BAAQMD 2017a), which is incorporated into this technical document by reference. In April 2022, the BAAQMD published the Thresholds of Significance Justification Report which presents the BAAQMD thresholds of significance for use in determining whether a proposed project will have a significant impact on climate change and provides the substantial evidence that lead agencies will need to support their use of these thresholds, which is also incorporated into this technical document by reference (BAAQMD 2022).

2 PROJECT LOCATION AND DESCRIPTION

2.1 Project Location

The proposed project is located on a 11.02-acre parcel adjacent to the northeast corner of Carlos Street and Sierra Street in the unincorporated community of Moss Beach, San Mateo County, California (Figure 1). The project site is bounded by vacant land to the southwest (towards State Route 1), residential properties along 16th Street to the northwest (in the community of Montara), and residential properties along Carlos, Sierra, and Lincoln Streets on the other two sides (Figure 2). Individual houses along Stetson Street and Buena Vista Street also border the property. The project site is approximately 750 feet east of the Pacific Ocean and is within 250 feet of Montara Creek at its closest point.

The project site is currently unoccupied and contains concrete building foundations and retaining walls in the center. Thick vegetation covers the majority of the project site outside the areas of the building foundations. Pacific Gas & Electricity (PG&E) provides natural gas and electricity to unincorporated San Mateo County through existing infrastructure. The project site contains some existing electrical infrastructure but no natural gas infrastructure. Natural gas would not be used during project operation.

The project proposes the development of 71 affordable housing units, which would house approximately 213 residents, contained in 16 two-story buildings and a community building for a total of 66,738 square feet. The project includes six different building layouts and unit configurations, ranging in height from 23 to 28 feet. Each unit would have bicycle parking and one assigned parking space. The project would cluster the residential units toward the northwestern corner of the site, retaining the forested open space on the northernmost portion of the site, and leaving room for landscaping and public trails to the south and east. The project does not include changes to the two existing water tanks on the site. The project would also involve construction of 3,364 square feet Community Building in the western portion of the project site, on the inner side of the access loop. The Community Building would contain an office for residential and leasing services, laundry facilities, maintenance and storage areas, a meeting room, computer room, and kitchen. A children's play area would be constructed adjacent to the Community Building with play structures for age 2-5 years and age 5-12 years. A barbeque and picnic area south of the Community Building, and a scenic overlook and picnic area at the southeast corner of the development would also be constructed. Three areas of synthetic turf between Building A and Building B and adjacent to the Community Building to the east and south would provide areas for outdoor recreation. All units, except for the manager's apartment, will be affordable to households earning up to 80% of the Area Median Income. In addition, the project proposes to include a preference for individuals who live and/or work in the region for 75% of the units.

The project would have a fenced community garden north of the Community Building with raised planting beds and a compost area. A network of pedestrian pathways linking residential buildings and community facilities and amenities throughout the project site would be available for recreational use by both residents and the general public. These pathways would include new unpaved pedestrian trails along the southern side of the property that connect to the driveway on Carlos Street and follow the alignment of an existing trail in the southeast corner of the site. A concrete multi-modal path from the driveway south to Sierra Street would be constructed.

Vehicular ingress/egress to and from the project site would be provided by a new 28-foot-wide single driveway on Carlos Street on the western boundary of the site. In addition to the main entrance, there would be an emergency access route from Lincoln Street to the northeast corner of the project. The project includes a total of 142 vehicular parking spaces in four separate parking areas, forming a loop around the central core of apartment buildings. Of these 142 spaces, there would be 6 designated ADA accessible parking spaces and 5 electric vehicle charging spaces. In addition to vehicle parking, there would be two secure bicycle parking enclosures on the east and west sides of the central driveway. These enclosures would each contain space for up to 20 bicycles. There would also be bicycle racks available in most of the building types and adjacent to the Community Building.

The project proposes development of approximately 5 acres of the 11.02-acre site for the Cypress Point Housing development. In order to ensure the efficient use of water, the landscaping elements to be added to the site would be irrigated with a permanent automated irrigation system and include all parts compatible with a remote- or satellite-controlled system. Vegetation would be selected which is low maintenance, water conserving, native to the project area, or adaptive to thrive under local conditions.

The project includes construction of solar panels on rooftops of all buildings which would supply the majority of the electricity demand for the project. The project also includes water-efficient appliances, including high efficiency washers with a water factor of 5 or less, toilets that use less than 1.6 gallons per flush in all residential units, and metering or self-closing faucets in all non-residential lavatories. The project's irrigation system would include an automatic weather-based controller, manual shut-off valves, matched precipitation rate sprinkler heads, a proper setback from non-permeable surfaces, and separate valves for different hydrozones. It would be designed to prevent runoff, low head drainage, and overspray.

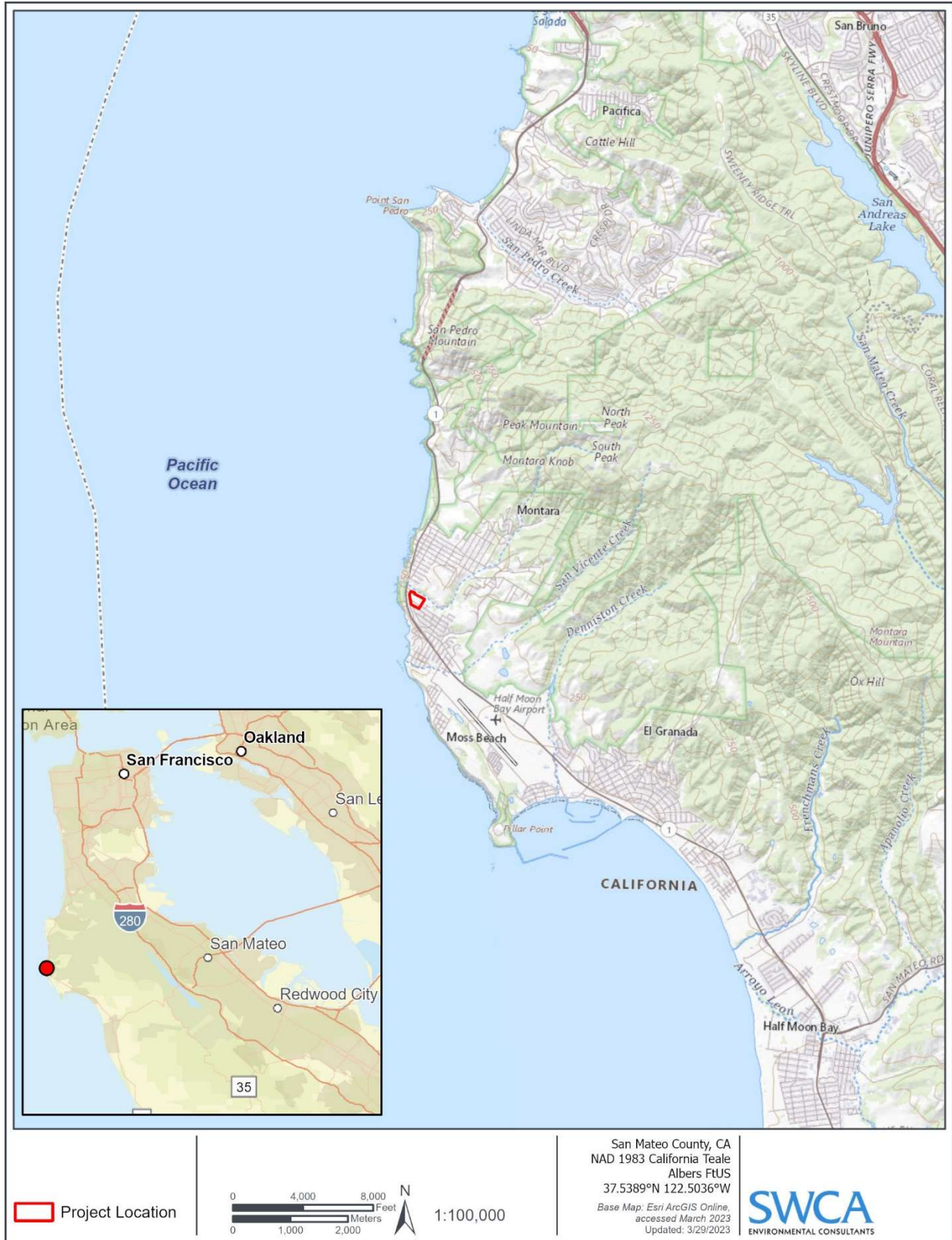


Figure 1. Vicinity map.



Figure 2. Project location.

2.2 Construction Time Frame and Phasing

Construction of the project, from mobilization to the site to final completion, is expected to occur over an approximately 18-month period, from December 2024 until June 2026. The project would be constructed in six phases: 1) demolition (including removal of the existing impervious surface of approximately 20,840 cubic yards and tree removal/wood chip dispersion); 2) site preparation (including site clearing, leveling, and transport of building materials); 3) grading (excavation, import approximately 7,500 cubic yards of fill); 4) building construction (including surveying, excavation/leveling for foundations, hydrostatic testing, watermain connections tested and connected, utility trenches, importation of building materials for residential buildings and the Community Building, all building construction); 5) paving (paving of onsite parking and roads and site concrete (curb, gutter, flatwork, etc.)); and 6) finishing (including finishing activities, architectural coatings, final landscaping, and removal of temporary fencing and erosion control). All construction activities, including construction staging of equipment, would be situated entirely within the project site. Typical construction equipment would be used during all phases of project construction and would be stored within the staging area, potentially including graders, excavators, dozers, and backhoes. Once construction is completed the project would be operational affordable housing units.

3 ENVIRONMENTAL SETTING

The project is located in San Mateo County within the San Francisco Bay Area Air Basin (SFBAAB), which consists of the entirety of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties; the western portion of Solano County; and the southern portion of Sonoma County. The BAAQMD has jurisdiction within this portion of the air basin. The BAAQMD has full jurisdiction within all San Mateo County. Ambient air quality within SFBAAB is affected by the climate, topography, and the type and amount of pollutants emitted.

3.1 Overview of Air Pollution and Potential Health Effects

3.1.1 Criteria Air Pollutants

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of specific pollutants in order to protect the public health and welfare. These pollutants are referred to as “criteria air pollutants” and the national and state standards have been set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment, either directly or in reaction with other pollutants due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in the air quality with the Air Basin. The criteria air pollutants for which national and state standards have been promulgated and which are most relevant to current air quality planning and regulation in the Air Basin include carbon monoxide (CO), ozone (O₃), particulate matter (PM), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead, sulfates, and hydrogen sulfide (H₂S). These pollutants, as well as volatile organic compounds (VOCs) and toxic air contaminants (TACs), are discussed in the following paragraphs. The national and state criteria pollutants and the applicable ambient air quality standards are listed in Table 1.

3.1.1.1 OZONE

O₃ is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O₃ precursors. These precursors are mainly oxides of nitrogen (NO_x) and VOCs. The maximum effects of precursor emissions on O₃ concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O₃ formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O₃ exists in the upper atmosphere O₃ layer (stratospheric ozone) and at the Earth's surface in the troposphere (ozone). The O₃ that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O₃ is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O₃. Stratospheric, or "good" O₃ occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O₃ layer, plant and animal life would be seriously harmed.

O₃ in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2022a). These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

3.1.1.2 NITROGEN DIOXIDE

NO₂ is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO₂ in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O₃. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

NO₂ can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections (EPA 2022a).

3.1.1.3 CARBON MONOXIDE

CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions (EPA 2022a).

3.1.1.4 SULFUR DIOXIDE

SO₂ is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO₂ are coal and oil used in power plants and industries; as such, the highest levels of SO₂ are generally found near large industrial complexes. In recent years, SO₂ concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO₂ and limits on the sulfur content of fuels.

SO₂ is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. When combined with particulate matter, SO₂ can injure lung tissue and reduce visibility and the level of sunlight. SO₂ can also yellow plant leaves and erode iron and steel (EPA 2022a).

3.1.1.5 PARTICULATE MATTER

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM_{2.5} and PM₁₀ represent fractions of particulate matter. Coarse particulate matter (PM₁₀) is 10 microns or less in diameter and is about 1/7 the thickness of a human hair. Major sources of PM₁₀ include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter (PM_{2.5}) is 2.5 microns or less in diameter and is roughly 1/28 the diameter of a human hair. PM_{2.5} results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, PM_{2.5} can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs.

PM_{2.5} and PM₁₀ pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM_{2.5} and PM₁₀ can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM₁₀ tends to collect in the upper portion of the respiratory system, PM_{2.5} is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing in particulate matter. Children may experience a decline in lung function due to breathing in PM_{2.5} and PM₁₀ (EPA 2022a).

3.1.1.6 LEAD

Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the

phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient (IQ) performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead (EPA 2022a).

3.1.1.7 OTHERS

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO₂ in the atmosphere. Sulfates can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. H₂S is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of H₂S include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to H₂S can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

3.1.2 Volatile Organic Compounds

VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids. Some VOCs are also classified by the State as TACs. While there are no specific VOC ambient air quality standards, VOC is a prime component (along with NO_x) of the photochemical processes by which such criteria pollutants as O₃, NO₂, and certain fine particles are formed. They are, thus, regulated as “precursors” to the formation of those criteria pollutants.

3.1.3 Toxic Air Contaminants

TACs refer to a diverse group of “non-criteria” air pollutants that can affect human health but have not have ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed above, but because their effects tend to be local rather than regional. TACs are 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 hot spots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

The federal TACs are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health, although there are no ambient standards established for TACs. Many pollutants are identified as TACs because of their potential to increase the risk of developing cancer or other acute (short-term) or chronic (long-term) health problems. For TACs that are known or suspected carcinogens, the CARB has consistently found that there are no levels or thresholds below which exposure is risk free. Individual TACs vary greatly in the risks they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another. For certain TACs, a unit risk factor can be developed to evaluate cancer risk. For acute and chronic health effects, a similar factor, called a Hazard Index, is used to evaluate risk. TACs are identified and their toxicity is studied by the California Office of Environmental Health Hazard Assessment (OEHHA). Examples of TAC sources include industrial processes, dry cleaners, gasoline stations, paint and solvent operations, and fossil fuel combustion sources. The TAC that is relevant to the implementation of the project include diesel particulate matter (DPM).

DPM was identified as a TAC by the CARB in August 1998 (CARB 1998). DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute approximately 40% of the statewide total, with an additional 57% attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources, contributing about 3% of emissions, include shipyards, warehouses, heavy-equipment repair yards, and oil and gas production operations. Emissions from these sources are from diesel-fueled internal combustion engines. Stationary sources that report DPM emissions also include heavy construction, manufacturers of asphalt paving materials and blocks, and diesel-fueled electrical generation facilities.

Exposure to DPM can have immediate health effects. DPM can have a range of health effects including irritation of eyes, throat, and lungs, causing headaches, lightheadedness, and nausea. Exposure to DPM also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. Children, the elderly, and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. In California, DPM has been identified as a carcinogen.

While not a TAC, fine particulate matter (PM_{2.5}) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the CEQA. Diesel exhaust is the predominant TAC in air in urban areas and is estimated to contribute more than eighty-five percent of a 2006 inventory of Bay Area cancer risk from TACs (BAAQMD 2014). According to CARB, diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

CARB has adopted and implemented a number of regulations to reduce emissions of DPM from stationary and mobile sources. Several of these regulatory programs affect medium- and heavy duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles, including those used at construction sites. The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. Therefore, as of January 1, 2023 all trucks and buses are 2010 or newer model year engines.

Naturally occurring asbestos areas are identified based on the type of rock found in the area. Asbestos-containing rocks found in California are ultramafic rocks, including serpentine rocks. Asbestos has been designated a TAC by the CARB and is a known carcinogen. When this material is disturbed in connection with construction, grading, quarrying, or surface mining operations, asbestos-containing dust can be generated. Exposure to asbestos can result in adverse health effects such as lung cancer, mesothelioma (cancer of the linings of the lungs and abdomen), and asbestosis (scarring of lung tissues that results in constricted breathing) (Van Gosen and Clinkenbeard 2011).

Naturally Occurring Asbestos (NOA) is prevalent in at least 44 of California's 58 counties. Asbestos is the name for a group of naturally occurring silicate minerals. Asbestos may be found in serpentine, other ultramafic and volcanic rock. When rock containing NOA is broken or crushed, asbestos may become released and become airborne, causing a potential health hazard. BAAQMD Regulation 11, Rule 2, controls emissions of asbestos to the atmosphere during demolition, renovation, milling and manufacturing and establish appropriate waste disposal procedures. The project is not located in a geologic setting with a potential to host asbestos and, therefore, an asbestos will not be an issue for this project (CARB 2000a).

Table 1. State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards	
			Primary	Secondary
Ozone (O ₃)	1 hour	0.09 ppm (180 µg/m ³)	--	Same as Primary
	8 hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	
Respirable particulate matter (PM ₁₀)	24 hour	50 µg/m ³	150 µg/m ³	Same as Primary
	Annual mean	20 µg/m ³	--	
Fine particulate matter (PM _{2.5})	24 hour	--	35 µg/m ³	Same as Primary
	Annual mean	12 µg/m ³	12.0 µg/m ³	15 µg/m ³
Carbon monoxide (CO)	1 hour	20 ppm (23 µg/m ³)	35 ppm (40 mg/m ³)	--
	8 hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	--
Nitrogen dioxide (NO ₂)	1 hour	0.18 ppm (339 µg/m ³)	100 ppb (188 µg/m ³)	--
	Annual mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
Sulfur dioxide (SO ₂)	1 hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	--
	3 hour	--	-	0.5 ppm (1300 µg/m ³)
	24 hour	0.04 ppm (105 µg/m ³)	0.14 ppm	--
	Annual mean	--	0.030 ppm	--
Lead	30-day average	1.5 µg/m ³	-	--
	Calendar quarter	--	1.5 µg/m ³	Same as Primary
	Rolling 3-month average	--	0.15 µg/m ³	Same as Primary
Visibility reducing particles	8 hour	10-mile visibility standard, extinction of 0.23 per kilometer	No National Standards	
Sulfates	24 hour	25 µg/m ³		
Hydrogen sulfide (H ₂ S)	1 hour	0.03 ppm (42 µg/m ³)		
Vinyl chloride	24 hour	0.01 ppm (265 µg/m ³)		

Source: CARB (2016)

Notes: ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter; -- = no standard.National annual PM_{2.5} primary standard is currently being proposed to be reduced to 9-10 µg/m³

3.1.4 Odors

A qualitative assessment should be made as to whether a project has the potential to generate odorous emissions of a type or quantity that could meet the statutory definition for nuisance, i.e., odors “which cause detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property” (Health & Safety Code § 41700). While offensive odors usually do not cause any physical harm, they can be unpleasant enough to lead to considerable distress among the public and generate citizen complaints to local governments and the BAAQMD. The Air District’s Regulation 7, Odorous Substances, places general limitations on

odorous substances and specific emission limitations on certain odorous compounds. Odors are also regulated under the Air District Regulation 1, Rule 1-301, Public Nuisance, which states that “no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health or safety of any such persons or the public, or which causes, or has a natural tendency to cause, injury or damage to business or property.” Under the Air District’s Rule 1-301, a facility that receives three or more violation notices within a 30-day period can be declared a public nuisance. 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.

3.2 Existing Air Quality Conditions in the Project Area

3.2.1 Regional Air Quality

The SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns. The Coast Range splits in the Bay Area, creating a western coast gap, the Golden Gate, and an eastern coast gap, the Carquinez Strait, which allows air to flow in and out of the Bay Area and the Central Valley. The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high-pressure cell is centered over the northeastern Pacific Ocean, resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below the surface because of the northwesterly flow produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold-water band, resulting in condensation and the presence of fog and stratus clouds along the Northern California coast. In the winter, the Pacific high-pressure cell weakens and shifts southward, resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential.

Summertime temperatures in the SFBAAB are determined in large part by the effect of differential heating between land and water surfaces. On summer afternoons, the temperatures at the coast can be 35 degrees Fahrenheit cooler than temperatures 15 to 20 miles inland; at night, this contrast usually decreases to less than 10 degrees Fahrenheit. In the winter, the relationship of minimum and maximum temperatures is reversed. During the daytime the temperature contrast between the coast and inland areas is small, whereas at night the variation in temperature is large.

The SFBAAB is characterized by moderately wet winters and dry summers. Winter rains (November through March) account for about 75 percent of the average annual rainfall. The amount of annual precipitation can vary greatly from one part of the SFBAAB to another, even within short distances. In general, total annual rainfall can reach 40 inches in the mountains, but it is often less than 16 inches in sheltered valleys. During rainy periods, ventilation (rapid horizontal movement of air and injection of cleaner air) and vertical mixing (an upward and downward movement of air) are usually high, and thus pollution levels tend to be low (i.e., air pollutants are dispersed more readily into the atmosphere rather than accumulate under stagnant conditions). However, during the winter, frequent dry periods do occur, where mixing and ventilation are low and pollutant levels build up.

3.2.2 Regional Attainment Status

Depending on whether the applicable ambient air quality standards are met or exceeded, the air basin is classified on a federal and state level as being in “attainment” or “nonattainment.” The EPA and CARB determine the air quality attainment status of designated areas by comparing ambient air quality

measurements from state and local ambient air monitoring stations with the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). These designations are determined on a pollutant-by-pollutant basis. Consistent with federal requirements, an unclassifiable/unclassified designation is treated as an attainment designation. The SFBAAB is currently designated a nonattainment area for California and National O₃, California and National PM_{2.5}, and California PM₁₀ AAQS. Therefore, is considered a “attainment/unclassified” area for all other pollutants (EPA 2023).

3.2.3 Local Air Quality

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

3.2.3.1 EXISTING CRITERIA POLLUTANT LEVELS AT NEARBY MONITORING STATIONS

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project area have been documented and measured by the BAAQMD. BAAQMD has 24 permanent monitoring stations located around the Bay Area. The nearest station is the Redwood City – 897 Barron Avenue Monitoring Station, which monitors O₃, NO₂, and PM_{2.5}. Data from this monitoring stations are summarized in Table 2, Ambient Air Quality Monitoring Summary. The data show violations of the State and federal O₃ standards and federal PM_{2.5} standard. In recent years, California has been plagued by an unprecedented number of wildfires that have produced dense palls of smoke in the Bay Area. The air quality data collected by BAAQMD in Table 2 include exceptional events, including wildfires. The GHG inventory for California for years 2015–2019 is presented in Table 3. The national and state criteria pollutants and the applicable ambient air quality standards are listed above in Table 1.

Table 2. Summary of Ambient Air Quality Monitoring Summary

Pollutant		Year		
		2019	2020	2021
O ₃	Maximum 1-hour concentration (ppm)	0.083	0.098	0.085
	Days exceeding CAAQS (0.09 ppm)	0	1	0
	Maximum 8-hour concentration (ppm)	0.077	0.077	0.063
	Days exceeding NAAQS (0.07 ppm)	2	1	0
	Days exceeding CAAQS (0.07 ppm)	2	1	0
NO ₂	Maximum 1-hour concentration (ppb)	0.0549	0.0459	0.0405
	Days exceeding CAAQS (0.18 ppm)	0	0	0
PM _{2.5}	Maximum 24-hour concentration (µg/m ³)	29.5	124.1	30.1
	Days exceeding NAAQS (35 µg/m ³)	0	9	0

Source: CARB (2023a)

Notes: AAM = annual arithmetic mean; ppm = parts per million; µg/m³ = micrograms per cubic meter

Data for O₃, NO₂, and PM_{2.5} was obtained from the Livermore – 793 Rincon Avenue Monitoring

BAAQMD also provides data that show areas in the SFBAAB that have elevated pollution levels and are identified as “impacted areas.” Based on BAAQMD’s Community Risk Evaluation Program maps, the project site is not within an “impacted area”.

Table 3. California Greenhouse Gas Inventory

Parameter	Unit*	Year				
		2015	2016	2017	2018	2019
Transportation	MMT CO ₂ e	166.2	169.8	171.2	169.6	166.1
	Percentage	38.5%	40.4%	41.2%	40.7%	40.6%
Electric power	MMT CO ₂ e	84.8	68.6	62.1	63.1	58.8
	Percentage	19.6%	16.3%	14.9%	15.2%	14.4%
Industrial	MMT CO ₂ e	90.3	89	88.8	89.2	88.2
	Percentage	20.9%	21.2%	21.4%	21.4%	21.5%
Commercial and residential	MMT CO ₂ e	38.8	40.6	41.3	41.4	43.8
	Percentage	9.0%	9.7%	9.9%	9.9%	10.7%
Agriculture	MMT CO ₂ e	33.5	33.3	32.5	32.7	31.8
	Percentage	7.8%	7.9%	7.8%	7.9%	7.8%
High global warming potential (GWP)	MMT CO ₂ e	18.6	19.2	20	20.4	20.6
	Percentage	4.3%	4.6%	4.8%	4.9%	5.0%
Total Net Emissions	MMT CO ₂ e	432.2	420.5	415.9	416.4	409.3

Source: California GHG Inventory for 2000–2019 (CARB 2021)

* MMT CO₂e = million metric tons carbon dioxide equivalent

3.2.3.2 EXISTING HEALTH RISK IN THE PROJECT VICINITY

OEHHA, on behalf of the California EPA (CalEPA), provides a screening tool called CalEnviroScreen that can be used to help identify California communities disproportionately burdened by multiple sources of pollution. The project is located in Census Tract 6081613600, which has 6,108 people. To determine the existing level of TACs in the area, the CalEnviroScreen indicator that represents modeled air concentration of chemical releases from large facility emissions in and nearby the census tract was identified. This indicator takes the air concentration and toxicity of the chemical to determine the toxic release score. The data is averaged over 2017 to 2019 and the toxic release indicator scores range from 0 to 96,985. The score for this census tract is 139.07 which means the toxic release percentile for this census tract is 28, meaning it is higher than 28% of the census tracts in California (OEHHA 2021).

The CalEnviroScreen for diesel particulate matter was also determined, as diesel particulate matter is also a TAC. This indicator represents how much diesel particulate matter is emitted into the air within and near the populated parts of the census tracts. The data from 2016 indicate that sources of diesel PM within and nearby the populated parts of this census tract emit 0.080 tons per year. The diesel PM percentile for this census tract is 30, meaning it is higher than 30% of the census tracts in California. Diesel emissions in California range between 0 - 15 tons per year. These indicators show that health risk in the project vicinity is low. Overall, according to CalEnviroScreen, the project is located in the 14th percentile, which

means the project area is about less than average in comparison to other communities within California (OEHHA 2021).

3.2.3.3 SENSITIVE USES

Some population groups, including children, elderly, and acutely and chronically ill persons (especially those with cardiorespiratory diseases), are considered more sensitive to air pollution than others. A sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant. The following are land uses where sensitive receptors are typically located:

- schools, playgrounds and childcare centers
- long-term health care facilities
- rehabilitation centers
- convalescent centers
- hospitals
- retirement homes
- residences

Sensitive receptors (residences) are located adjacent to the north, east and south of the project site, with additional residences located southwest of the site, as shown in Figure 1 of the 2018 Report. The maximally exposed individual (MEI) is the receptor exposed to the maximum excess cancer risk and annual PM_{2.5} concentration. Project impacts are quantified only for these nearest sensitive receptors. However, implementation of the proposed project would not result in the long-term operation of any emission sources that would adversely affect nearby sensitive receptors. Short-term (18 months) construction activities could result in temporary increases in pollutant concentrations. The construction-related emissions would be short term and located at different locations within the project site. Although construction would occur over 18 months, construction at any one site would last for a much shorter time. The limited duration and limited quantities of construction emissions ensure that no individual receptor would be exposed to substantial pollutant concentrations. During construction, the BAAQMD BMPs would minimize construction impacts by reducing dust and exhaust emissions.

3.3 Greenhouse Gas Setting

Global climate change refers to the changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Global warming, a related concept, is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. There is a general scientific consensus that global climate change is occurring, caused in whole or in part by increased emissions of GHGs that keep the Earth's surface warm by trapping heat in the Earth's atmosphere, in much the same way as glass traps heat in a greenhouse. The Earth's climate is changing because human activities, primarily the combustion of fossil fuels, are altering the chemical composition of the atmosphere through the buildup of GHGs. GHGs are released by the combustion of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect. While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 has led to increased efforts devoted to GHG emissions reduction and climate change research and policy.

Regarding the adverse effects of global warming, as reported by Assembly Bill 2538: "Global warming poses a serious threat to the economic well-being, public health, natural resources and the environment of California." Over the past few decades, energy intensity of the national and state economy has been

declining due to the shift to a more service-oriented economy. California ranked fifth lowest among the States in carbon dioxide (CO₂) emissions from fossil fuel consumption per unit of gross state product. However, in terms of total CO₂ emissions California is second only to Texas in the nation and is the 16th largest source of climate change emissions in the world, exceeding most nations.

3.3.1 Greenhouse Gas Background

GHGs include CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Carbon is the most abundant GHG. Other GHGs are less abundant but have higher global warming potential than CO₂. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO₂, denoted as CO₂e. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions. The primary GHGs attributed to global climate change are described below.

3.3.1.1 CARBON DIOXIDE (CO₂)

In the atmosphere, carbon generally exists in its oxidized form, as CO₂. Natural sources of CO₂ include the respiration (breathing) of humans, animals, and plants, volcanic outgassing, decomposition of organic matter, and evaporation from the oceans. Anthropogenic sources of CO₂ include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Anthropogenic sources of CO₂ amount to over 30 billion tons per year, globally (Friedlingstein et al. 2022). Natural sources release substantially larger amounts of CO₂. Nevertheless, natural removal processes, such as photosynthesis by land and ocean-dwelling plant species, cannot keep pace with this extra input of human-made CO₂, and, consequently, the gas is building up in the atmosphere.

3.3.1.1.1 Methane (CH₄)

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Decomposition occurring in landfills accounts for the majority of human-generated CH₄ emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation, manure management, and rice cultivation are also significant sources of CH₄ in California.

3.3.1.1.2 Nitrous Oxide (N₂O)

Nitrous oxide is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion produce N₂O, and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N₂O emissions in California.

3.3.1.1.3 Hydrofluorocarbons, Perfluorocarbons, Sulfur Hexafluoride

Hydrofluorocarbons (HFCs) are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol (1987), an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion. Perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆) are emitted from various industrial processes, including aluminum smelting,

semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no primary aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry leads to greater use of PFCs.

The magnitude of the impact on global warming differs among the GHGs. The effect each GHG has on climate change is measured as a combination of the volume of its emissions, and its global warming potential (GWP). GWPs are one type of simplified index based upon radiative properties used to estimate the potential future impacts of emissions of different gases upon the climate system, expressed as a function of how much warming would be caused by the same mass of CO₂. Thus, GHG emissions are typically measured in terms of pounds or tons of CO₂ equivalents (CO₂e). GWPs are based on a number of factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO₂, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO₂. The larger GWP, the more that a given gas warms the Earth compared to CO₂ over that time period. HFCs, PFCs, and SF₆ have a greater “global warming potential” than CO₂. In other words, these other GHGs have a greater contribution to global warming than CO₂ on a per-mass basis. However, CO₂ has the greatest impact on global warming because of the relatively large quantities of CO₂ emitted into the atmosphere.

A summary of the atmospheric lifetime and GWP of selected gases is presented in Table 4. As indicated in this table, GWPs range from 1 to 23,500 based on IPCC Assessment Reports. IPCC has released three assessment reports (AR4, AR5, and AR6) with updated GWPs, however, CARB reports the statewide GHG inventory using the AR4 GWPs, which is consistent with international reporting standards. By applying the GWP ratios, project-related equivalent mass of CO₂, denoted as CO₂e emissions can be tabulated in metric tons per year.

Table 4. Global Warming Potentials

Greenhouse Gas	GWP Values for 100-year Time Horizon		
	AR4*	AR5	AR6
Carbon dioxide (CO ₂)	1	1	1
Methane (CH ₄)	25	28	Fossil origin – 29.8 Non-fossil origin – 27.2
Nitrous oxide (N ₂ O)	298	265	273
Select hydrofluorocarbons (HFCs)	124–14,800	4–12,400	–
Sulfur hexafluoride (SF ₆)	22,800	23,500	–

Sources: IPCC (2007, 2013).

* For consistency with the EPA and its Inventory of Greenhouse Gas Reporting, we have represented values from AR4 of the IPCC report in this report.

3.3.2 Greenhouse Gas Emissions Inventories

3.3.2.1 UNITED STATES GHG EMISSIONS

Per the EPA’s *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2020* (EPA 2022b), total U.S. GHG emissions have decreased by 6.6% from 1990 to 2020; 2005 emissions were 15.8% above 1990 levels. The largest source of GHG emissions from human activities in the United States is from burning of fossil fuels for electricity, heat, and transportation. The latest national GHG emissions are for calendar year 2020, in which total gross U.S. GHG emissions were reported at 5,981.4 million metric tons carbon dioxide equivalent (MMT CO₂e). Emissions decreased from 2019 to 2020 by 543.4 MMT CO₂e and net emissions (including sinks) were 5,222.4 MMT CO₂e.

3.3.2.2 STATEWIDE GHG EMISSIONS

According to California's 2000–2019 GHG emissions inventory, California emitted 409.3 MMT CO₂e in 2019 (CARB 2021). The sources of GHG emissions in California include transportation, industrial uses, electric power production from both in-state and out-of-state sources, commercial and residential uses, agriculture, high global-warming potential substances, and recycling and waste. The California GHG emission source categories (as defined in CARB's 2008 Scoping Plan) and their relative contributions in 2019 are presented in Table 3. Total GHG emissions in 2019 were approximately 22.9 MMT CO₂e less than 2016 emissions. Based on data presented, the 2016 statewide GHG inventory fell below 1990 levels, consistent with AB 32. The declining trend in GHG emissions, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrates that California will continue to reduce emissions below the 2020 target of 431 MTCO₂e (CARB 2022a).

4 REGULATORY SETTING

Federal, state, and local agencies have set ambient air quality standards for certain air pollutants through statutory requirements and have established regulations and various plans and policies to maintain and improve air quality, as described below.

4.1 Federal

4.1.1 Federal Clean Air Act

4.1.1.1 AIR QUALITY

The federal Clean Air Act (CAA), which was passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The CAA delegates primary responsibility for clean air to the EPA. The EPA develops rules and regulations to preserve and improve air quality and delegates specific responsibilities to state and local agencies. Under the act, the EPA has established the NAAQS for six criteria air pollutants that are pervasive in urban environments and for which state and national health-based ambient air quality standards have been established. Ozone (O₃), CO, NO₂, SO₂, lead, and particulate matter (PM₁₀ and PM_{2.5}) are the six criteria air pollutants. Ozone is a secondary pollutant; NO_x and VOCs are of particular interest as they are precursors to ozone formation. The NAAQS are divided into primary and secondary standards; the primary standards are set to protect human health within an adequate margin of safety, and the secondary standards are set to protect environmental values, such as plant and animal life. The standards for all criteria pollutants are presented in Table 1.

The CAA requires the EPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. The act also mandates that the State submit and implement a State Implementation Plan for areas not meeting the NAAQS. These plans must include pollution control measures that demonstrate how the standards will be met.

4.1.1.2 GREENHOUSE GAS EMISSIONS

The Supreme Court of the United States (SCOTUS) ruled in *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438 (2007), that CO₂ and other GHGs are pollutants under the federal CAA, which the EPA must regulate if it determines they pose an endangerment to public health or welfare. SCOTUS did not mandate that the EPA enact regulations to reduce GHG emissions. Instead, SCOTUS found that

the EPA could avoid taking action if it found that GHGs do not contribute to climate change or if it offered a “reasonable explanation” for not determining that GHGs contribute to climate change.

On April 17, 2009, the EPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare. On April 24, 2009, the proposed rule was published in the Federal Register under Docket ID No. EPA-HQ-OAR-2009~0171. The EPA stated that high atmospheric levels of GHGs “are the unambiguous result of human emissions and are very likely the cause of the observed increase in average temperatures and other climatic changes.” The EPA further found that “atmospheric concentrations of greenhouse gases endanger public health and welfare within the meaning of Section 202 of the Clean Air Act.” The findings were signed by the EPA Administrator on December 7, 2009. The final findings were published in the Federal Register on December 15, 2009. The final rule was effective on January 14, 2010. While these findings alone do not impose any requirements on industry or other entities, this action is a prerequisite to regulatory actions by the EPA, including, but not limited to, GHG emissions standards for light-duty vehicles.

On July 20, 2011, the EPA published its final rule deferring GHG permitting requirements for CO₂ emissions from biomass-fired and other biogenic sources until July 21, 2014. Environmental groups challenged the deferral. In September 2011, EPA released an “Accounting Framework for Biogenic CO₂ Emissions from Stationary Sources,” which analyses accounting methodologies and suggests implementation for biogenic CO₂ emitted from stationary sources.

On April 4, 2012, the EPA published a proposed rule to establish, for the first time, a new source performance standard for GHG emissions. Under the proposed rule, new fossil fuel-fired generating units larger than 25 megawatts are required to limit emissions to 1,000 pounds of CO₂ per megawatt-hour on an average annual basis, subject to certain exceptions.

On April 17, 2022, the EPA issued emission rules for oil production and natural gas production and processing operations, which are required by the CAA under Title 40 of the Code of Federal Regulations (CFR) Parts 60 and 63. The final rules include the first federal air standards for natural gas wells that are hydraulically fractured, along with requirements for several other sources of pollution in the oil and gas industry that currently are not regulated at the federal level.

4.1.2 Toxic Substance Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. TSCA became law on October 11, 1976, and became effective on January 1, 1977. The TSCA authorized the EPA to secure information on all new and existing chemical substances, as well as to control any of the substances that were determined to cause unreasonable risk to public health or the environment. Congress later added additional titles to the Act, with this original part designated at Title I – Control of Hazardous Substances. TSCA regulatory authority and program implementation rests predominantly with the federal government (i.e., the EPA). However, the EPA can authorize States to operate their own, EPA-authorized programs for some portions of the statute. TSCA Title IV allows States the flexibility to develop accreditation and certification programs and work practice standards for lead-related inspection, risk assessment, renovation, and abatement that are at least as protective as existing federal standards.

4.1.3 National Emission Standards for Hazardous Air Pollutants (Asbestos)

The EPA’s air toxics regulation for asbestos is intended to minimize the release of asbestos fibers during activities involving the handling of asbestos. Asbestos was one of the first hazardous air pollutants

regulated under the air toxics program as there are major health effects associated with asbestos exposure (lung cancer, mesothelioma, and asbestosis). On March 31, 1971, the EPA identified asbestos as a hazardous pollutant, and on April 6, 1973, EPA promulgated the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP), currently found in 40 CFR 61(M). The Asbestos NESHAP has been amended several times, most comprehensively in November 1990. In 1995, the rule was amended to correct cross-reference citations to Occupational Safety and Health Administration, Department of Transportation, and other EPA rules governing asbestos. Air toxics regulations under the CAA have guidance on reducing asbestos in renovation and demolition of buildings; institutional, commercial, and industrial building; large-scale residential demolition; exceptions to the asbestos removal requirements; asbestos control methods; waste disposal and transportation; and milling, manufacturing, and fabrication.

4.2 State

4.2.1 California Clean Air Act

The California Clean Air Act (CCAA) was adopted by the CARB in 1988. The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for Ozone, CO, SO₂, and NO₂ by the earliest practical date. The CCAA specifies that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. The CARB and local air districts are responsible for achieving CAAQS, which are to be achieved through district-level AQMPs that would be incorporated into the State Implementation Plan. In California, the EPA has delegated authority to prepare State Implementation Plans to CARB, which in turn, has delegated that authority to individual air districts. Each district plan is required to either 1) achieve a 5% annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each non-attainment pollutant or its precursors, or 2) to provide for implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

The State of California began to set its ambient air quality standards (i.e., CAAQS) in 1969, under the mandate of the Mulford-Carrell Act. The CCAA requires all air districts of the state to achieve and maintain the CAAQS by the earliest practical date. Table 1 shows the CAAQS currently in effect for each of the criteria pollutants, as well as the other pollutants recognized by the State. As shown in Table 1, the CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, H₂S, vinyl chloride, and visibility-reducing particles.

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

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

4.2.2 California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended, or repealed by the state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location. In addition, Section 93115 in Title 17

of the CCR states that operation of any stationary, diesel-fueled, compression-ignition engine shall meet specified fuel and fuel additive requirements and emission standards.

4.2.3 Toxic Air Contaminants Regulations

California regulates TACs primarily through the Toxic Air Contaminant Identification and Control Act of 1983 (AB 1807, also known as the Tanner Air Toxics Act) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588 – Connelly). In the early 1980s, the CARB established a statewide comprehensive air toxics program to reduce exposure to air toxics. The Tanner Air Toxics Act (AB 1807) created California’s program to reduce exposure to air toxics. The Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) supplements the AB 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks (CARB 2011).

In August 1998, CARB identified DPM emissions from diesel-fueled engines as a TAC. In September 2000, CARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles (CARB 2000b). The goal of the plan is to reduce diesel PM₁₀ (inhalable particulate matter) emissions and the associated health risk by 75% in 2010, and by 85% by 2020. The plan identified 14 measures that target new and existing on-road vehicles (e.g., heavy-duty trucks and buses, etc.), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps, etc.), and stationary engines (e.g., stand-by power generators, etc.). During the control measure phase, specific statewide regulations designed to further reduce DPM emissions from diesel-fueled engines and vehicles were evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce DPM emissions. The project would be required to comply with applicable diesel control measures.

Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

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

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

4.2.4 Executive Order S-3-05, Executive Order B-30-15, and Executive Order B-55-18

In 2005, the governor issued EO S-3-05, establishing statewide GHG emissions reduction targets, as well as a process to ensure the targets are met. The order directed the Secretary of the CalEPA to report every 2 years on the State’s progress toward meeting the governor’s GHG emission reduction targets. The statewide GHG targets established by Executive Order S-3-05 are as follows:

- By 2010, reduce to 2000 emission levels,
- By 2020, reduce to 1990 emission levels, and
- By 2050, reduce to 80 percent below 1990 levels.

EO B-30-15, issued by Governor Brown in April 2015, established an additional statewide policy goal to reduce GHG emissions 40% below their 1990 levels by 2030. Reducing GHG emissions by 40% below 1990 levels in 2030 and by 80% below 1990 levels by 2050 (consistent with EO S-3-05) aligns with scientifically established levels needed in the United States to limit global warming below 2 degrees Celsius.

The State Legislature adopted equivalent 2020 and 2030 statewide targets in the California Global Warming Solutions Act of 2006 (also known as AB 32) and Senate Bill (SB) 32, respectively, both of which are discussed below. However, the legislature has not yet adopted a target for the 2050 horizon year. As a result of EO S-3-05, the California Action Team (CAT), led by the Secretary of CalEPA, was formed. The CAT is made of representatives from a number of state agencies and was formed to implement global warming emission reduction programs and to report on the progress made toward meeting statewide targets established under the EO. The CAT reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the EO.

The CAT stated that “smart” land use is an umbrella term for strategies that integrate transportation and land use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. “Intelligent transportation systems” is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and the movement of people, goods, and service.

EO B-55-18, issued by Governor Brown in September 2018, establishes a new statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045, and achieve and maintain net negative emissions thereafter. Based on this executive order, CARB would work with relevant state agencies to develop a framework for implementation and accounting that tracks progress toward this goal, as well as ensuring future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

4.2.5 Assembly Bill 32 — California Global Warming Solution Act

The California Global Warming Solutions Act of 2006 (also known as AB 32) commits the State to achieving the following:

- By 2010, reduce to 2000 GHG emission levels, and
- By 2020, reduce to 1990 levels.

To achieve these goals, which are consistent with the California CAT GHG targets for 2010 and 2020, AB 32 mandates that the CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources consistent with the CAT strategies, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. In order to achieve the reductions, AB 32 requires CARB to adopt rules and regulations in

an open, public process that achieves the maximum technologically feasible and cost-effective GHG reductions.

SB 32, signed September 8, 2016, updates AB 32 to include an emissions reduction goal for the year 2030. Specifically, SB 32 requires CARB to ensure that statewide GHG emissions are reduced to 40% below the 1990 level by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

4.2.6 Climate Change Scoping Plan

In 2008, CARB approved a Climate Change Scoping Plan, as required by AB 32. Subsequently, CARB approved updates of the Climate Change Scoping Plan in 2014 (First Update) and 2017 (2017 Update), with the 2017 Update considering SB 32 (adopted in 2016) in addition to AB 32 (CARB 2014, 2017a). The First Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals (to the level of 427 MMT CO₂e) defined in the original Scoping Plan. It also evaluates how to align the State's longer-term GHG reduction strategies with other State policy priorities, such as for water, waste, natural resources, clean energy and transportation, and land use. In November 2022, the final 2022 Scoping Plan Update and Appendices was released. This 2022 Scoping Plan Update assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045 (CARB 2022c). The 2022 Scoping Plan Update, , focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

4.2.7 Assembly Bill 197

AB 197, signed September 8, 2016, is a bill linked to SB 32 that prioritizes efforts to reduce GHG emissions in low-income and minority communities. AB 197 requires the CARB to make available, and update at least annually on its website, the emissions of GHGs, criteria pollutants, and TACs for each facility that reports to CARB and air districts. In addition, AB 197 adds two members of the legislature to the CARB board as ex officio, non-voting members, and also creates the Joint Legislative Committee on Climate Change Policies to ascertain facts and make recommendations to the legislature concerning the State's programs, policies, and investments related to climate change.

4.2.8 Cap-and-Trade Program

The 2008 Climate Change Scoping Plan identified a cap-and-trade program as one of the strategies for California to reduce GHG emissions. The cap-and-trade program is a key element in California's climate plan. It sets a statewide limit on sources responsible for 85 percent of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The cap-and-trade rules came into effect on January 1, 2013, and apply to large electric power plants and large industrial plants. In 2015, fuel distributors, including distributors of heating and transportation fuels, also became subject to the cap-and-trade rules. At that stage, the program will encompass around 360 businesses throughout California and nearly 85 percent of the state's total GHG emissions. Covered entities subject to the cap-and-trade program are sources that emit more than 25,000 metric tons CO₂e (MTCO₂e) per year. Triggering of the 25,000 MTCO₂e per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Rule).

Under the cap-and-trade regulation, companies must hold enough emission allowances to cover their emissions and are free to buy and sell allowances on the open market. California held its first auction of GHG allowances on November 14, 2012. California's GHG cap-and-trade system is projected to reduce GHG emissions to 1990 levels by the year 2020 and would achieve an approximate 80 percent reduction from 1990 levels by 2050.

4.2.9 Assembly Bill 1493 (Pavley I)

AB 1493, passed in 2002, requires the development and adoption of regulations to achieve the maximum feasible reduction in GHG emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the state. CARB originally approved regulations to reduce GHG from passenger vehicles in September 2004, which took effect in 2009. On September 24, 2009, CARB adopted amendments to these regulations that reduce GHG emissions and new passenger vehicles from 2009 through 2016. Although setting emission standards on automobiles is solely the responsibility of the EPA, the federal CAA allows California to set state-specific emission standards on automobiles, and the State first obtains a waiver from the EPA. The EPA granted California that waiver until July 1, 2009. The comparison between the AB 1493 standards and the federal Corporate Average Fuel Economy standards was completed by CARB, and the analysis determined the California emission standards were 16% more stringent through the 2016 model year and 18% more stringent for the 2020 model year. CARB is also committed to further strengthening these standards beginning with 2020 model year vehicles, to obtain a 45% GHG reduction in comparison to 2009 model years.

In March 2020, the EPA issued the Safer Affordable Fuel-Efficient Vehicles Rule (SAFE) which would roll back fuel economy standards and revoke California's waiver. Under this rule, EPA would amend certain average fuel economy and GHG standards for passenger cars covering model years 2021 through 2026. In September 2019, the EPA withdrew the waiver had previously provided in California for the states GHG and Zero Emission Vehicle (ZEV) programs under Section 209 of the Clean Air Act. The withdrawal of the waiver beginning effective on November 26th, 2019. In response, several states including California have a lawsuit challenging the withdrawal of the EPA waiver. These actions continue to be challenged in court. As noted above, on January 20, 2021, President Biden issued an executive order directing all executive departments and agencies to take action, as appropriate, to address federal regulations and other actions taken during the last 4 years that conflict with the administration's climate and environmental justice goals, which include SAFE.

4.2.10 Executive Order S-01-07 (California Low Carbon Fuel Standard)

EO S-01-07, the Low Carbon Fuel Standard (LCFS) (issued January 18, 2007), requires a reduction of at least 10% in the carbon intensity of California transportation fuels by 2020. Regulatory proceedings and implementation of the LCFS was directed to CARB. CARB released a draft version of the LCFS in October 2008. The final regulation was approved by the Office of Administrative Law and filed with the Secretary of State on January 12, 2010; the LCFS became effective on the same day.

The 2017 update has identified LCFS as a regulatory measure to reduce GHG emission to meet the 2030 emissions target. In calculating statewide emissions and targets, the 2017 update has assumed the LCFS be extended to an 18% reduction in carbon intensity beyond 2020. On September 27, 2018, CARB approved a rulemaking package that amended the LCFS to relax the 2020 carbon intensity reduction from 10% to 7.5%, and to require a carbon intensity reduction of 20% by 2030.

4.2.11 Advanced Clean Car Regulations

In 2012, CARB approved the Advanced Clean Cars program, a new emissions control program for model years 2015 through 2025. The components of the advanced clean car standards include the Low-Emission Vehicle regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero Emission Vehicle regulation, which requires manufacturers to produce an increasing number of pure ZEVs, with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years period. In March 2017, CARB voted unanimously to continue with the vehicle GHG emission standards and the ZEV programs for cars and light trucks sold in California through 2025.

4.2.12 Senate Bill 375

This bill requires CARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization for each region must then develop a “Sustainable Communities Strategy” (SCS) that integrates transportation, land use, and housing policies to plan how it will achieve the emissions target for its region. If the SCS is unable to achieve the regional GHG emissions reductions targets, then the Metropolitan Planning Organization is required to prepare an alternative planning strategy that shows how the GHG emissions reduction target can be achieved through alternative development patterns, infrastructure, and/or transportation measures.

As required under SB 375, CARB is required to update regional GHG emission targets every 8 years, with last update formally adopted March 2018. As part of the 2018 update, CARB has adopted a passenger vehicle–related GHG reduction target of 19% by 2035 for the SCAG region, which is more stringent than the previous reduction target of 13% for 2035.

4.2.13 Senate Bill 97

Senate Bill 97 (SB 97) was enacted in 2007. SB 97 required Governor’s Office of Planning and Research (OPR) to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHG emissions (OPR 2008, 2018). Those CEQA Guidelines amendments clarified several points, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects and must reach a conclusion regarding the significance of those emissions.
- When a project’s GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions.
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change.
- Lead agencies may significantly streamline the analysis of GHGs on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria.
- CEQA mandates analysis of a proposed project’s potential energy use (including transportation-related energy), sources of energy supply and ways to reduce energy demand, including through the use of efficient transportation alternatives.

As part of the administrative rulemaking process, the California Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the CEQA Guidelines amendments. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010. SB 97 applies to any environmental impact report (EIR), negative

declaration, mitigated negative declaration, or other document required by CEQA, which has not been finalized.

4.3 Regional

4.3.1 Bay Area Air Quality Management District

The BAAQMD is the agency responsible for ensuring that the National and California AAQS are attained and maintained in the SFBAAB. Air quality conditions in the SFBAAB have improved significantly since the BAAQMD was created in 1955. The BAAQMD prepares air quality management plans (AQMP) to attain ambient air quality standards in the SFBAAB. The BAAQMD prepares ozone attainment plans for the National O₃ standard and clean air plans for the California O₃ standard. The BAAQMD prepares these air quality management plans in coordination with Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) to ensure consistent assumptions about regional growth.

4.3.1.1 BAY AREA AIR QUALITY MANAGEMENT DISTRICT 2017 CLEAN AIR PLAN

BAAQMD adopted the 2017 “Clean Air Plan: Spare the Air, Cool the Climate” (2017 Clean Air Plan) on April 19, 2017, making it the most recently adopted comprehensive plan. The 2017 Clean Air Plan incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools (CARB 2017b). The 2017 Clean Air Plan serves as an update to the adopted Bay Area 2010 Clean Air Plan and continues to provide the framework for SFBAAB to achieve attainment of the California and National AAQS. The 2017 Clean Air Plan updates the Bay Area’s ozone plan, which is based on the “all feasible measures” approach to meet the requirements of the California Clean Air Act. It sets a goal of reducing health risk impacts to local communities by 20 percent between 2015 and 2020 and lays the groundwork for reducing GHG emissions in the Bay Area to meet the State’s 2030 GHG reduction target and 2050 GHG reduction goal. It also includes a vision for the Bay Area in a post-carbon year 2050 that encompasses the following:

- Construct buildings that are energy efficient and powered by renewable energy.
- Walk, bicycle, and use public transit for the majority of trips and use electric-powered autonomous public transit fleets.
- Incubate and produce clean energy technologies.
- Live a low-carbon lifestyle by purchasing low-carbon foods and goods in addition to recycling and putting organic waste to productive use.

A multipollutant control strategy was developed to be implemented in the next three to five years to address public health and climate change and to set a pathway to achieve the 2050 vision. The control strategy includes 85 control measures to reduce emissions of ozone, particulate matter, TACs, and GHG from a full range of emission sources. These control measures cover the following sectors: 1) stationary (industrial) sources; 2) transportation; 3) energy; 4) agriculture; 5) natural and working lands; 6) waste management; 7) water; and 8) super-GHG pollutants and 9) buildings. The proposed control strategy is based on the following key priorities:

- Reduce emissions of criteria air pollutants and toxic air contaminants from all key sources.
- Reduce emissions of “super-GHGs” such as methane, black carbon, and fluorinated gases.
- Decrease demand for fossil fuels (gasoline, diesel, and natural gas).
- Increase efficiency of the energy and transportation systems.
- Reduce demand for vehicle travel, and high-carbon goods and services.
- Decarbonize the energy system.
- Make the electricity supply carbon-free.
- Electrify the transportation and building sectors.

4.3.1.2 COMMUNITY AIR RISK EVALUATION PROGRAM

The BAAQMD Community Air Risk Evaluation program was initiated in 2004 to evaluate and reduce health risks associated with exposure to outdoor TACs in the Bay Area, primarily DPM. The last update to this program was in 2014. Based on findings of the latest report, DPM was found to account for approximately 85 percent of the cancer risk from airborne toxics. Carcinogenic compounds from gasoline-powered cars and light duty trucks were also identified as significant contributors: 1,3-butadiene contributed 4 percent of the cancer risk-weighted emissions, and benzene contributed 3 percent. Collectively, five compounds—DPM, 1,3-butadiene, benzene, formaldehyde, and acetaldehyde—were found to be responsible for more than 90 percent of the cancer risk attributed to emissions. All of these compounds are associated with emissions from internal combustion engines. The most important sources of cancer risk-weighted emissions were combustion-related sources of DPM, including on-road mobile sources (31 percent), construction equipment (29 percent), and ships and harbor craft (13 percent). Overall, cancer risk from TAC dropped by more than 50 percent between 2005 and 2015, when emissions inputs accounted for State diesel regulations and other reductions.

The major contributor to acute and chronic non-cancer health effects in the Air Basin is acrolein (C₃H₄O). Major sources of acrolein are on-road mobile sources and aircraft near freeways and commercial and military airports (BAAQMD 2006). Currently CARB does not have certified emission factors or an analytical test method for acrolein. Since the appropriate tools needed to implement and enforce acrolein emission limits are not available, the Air District does not conduct health risk screening analysis for acrolein emissions (BAAQMD 2010).

4.3.1.3 ASSEMBLY BILL 617 COMMUNITY ACTION PLANS

AB 617 was signed into law in July 2017 to develop a new community-focused program to reduce exposure more effectively to air pollution and preserve public health in environmental justice communities. AB 617 directs CARB and all local air districts to take measures to protect communities disproportionately impacted by air pollution through monitoring and implementing air pollution control strategies.

On September 27, 2018, CARB approved BAAQMD’s recommended communities for monitoring and emission reduction planning. The State approved communities for year 1 of the program as well as communities that would move forward over the next five years. Bay Area recommendations included all the Community Air Risk Evaluation areas, areas with large sources of air pollution (refineries, seaports,

airports, etc.), areas identified via statewide screening tools as having pollution and/or health burden vulnerability, and areas with low life expectancy (BAAQMD 2019).

4.3.2 County of San Mateo 2020 Climate Action Plan

The San Mateo County 2022 Community Climate Action Plan (CCAP) outlines priority actions to achieve a 45% reduction of GHG emissions over 1990 levels by 2030 and carbon neutrality by 2040. The CCAP streamlines the development process by meeting the Bay Area Air Quality Management District's requirements for a Qualified GHG Reduction Strategy. The CCAP also supports the goals and policies of AB 32 –The California Global Warming Solutions Act of 2006. The County's strategies and actions are structured around four focus areas: building energy, transportation, waste and working lands.

Buildings are the second largest contributor to GHG emissions in unincorporated areas of the County, accounting for 32% of all emissions. These emissions stem primarily from the use of natural gas in residential and commercial buildings.

Emissions in the transportation sector come from people driving vehicles (vehicle miles traveled or VMT) on roads within the county. In 2017, this represented 40% of the County's emissions inventory and remains the largest contributor when compared to the other sectors. Reducing this emissions source will require reducing VMT as well as increasing the community adoption of electric vehicles (EVs). While making this change will require multijurisdictional action beyond the County's jurisdiction, and will rely upon individual behavior change, the County can still play a critical role. San Mateo County can facilitate EV adoption, build the necessary charging infrastructure to enable widespread EV use, increase access to jobs, goods and services in neighborhoods, help its communities shift to active transportation (human-powered forms of transportation including walking, rolling, and biking), and work in partnership to enhance and improve public transit access and ridership.

Waste produced in unincorporated communities is sent to Ox Mountain Landfill where the organic materials decompose and produce methane, which is a GHG. Waste represents a smaller share of overall county emissions at 26%. There are measures designed to prevent materials from entering the landfill through source reduction and waste diversion actions such as reducing waste generated, reusing materials, composting organics, and recycling.

Rangeland and cropland, including publicly and privately managed lands, comprise a large portion of the land base in California and in San Mateo County. These working lands have significant potential for sequestering carbon from the atmosphere, thus serving as a climate mitigation strategy. Active management of working lands can enhance the rate of carbon sequestration in soils and vegetation, therefore carbon farming (i.e. the suite of practices that brings about more sequestration) has a critical role to play in helping San Mateo County develop resilience to climate change while simultaneously reducing atmospheric greenhouse gases driving climate change.

4.3.3 County of San Mateo General Plan

The General Plan is the County's vision for future development. It identifies goals, policies, and objectives to govern the physical development of the County. State law requires each city and county to adopt a General Plan with a minimum of seven elements: Land Use, Circulation, Housing, Conservation, Open-Space, Noise, and Safety. The San Mateo General Plan contains seventeen chapters addressing each of the required elements and additional elements like transportation and climate element. Many of the general plan policies affect air quality and greenhouse gas emissions for the County. For example, this General Plan Climate Change Element demonstrates San Mateo County's commitment to achieve energy

efficiency and mitigate its impact on climate change by reducing GHG emissions consistent with state legislation.

4.3.4 California Coastal Act

California Coastal Act Section 30253(c) requires that new development in the Coastal Zone shall “be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.” In this case, the air pollution control district is BAAQMD.

5 THRESHOLDS OF SIGNIFICANCE

5.1 Air Quality

Based upon the environmental checklist presented in Appendix G of the State CEQA Guidelines, the project would have a significant impact on air quality if it would:

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

A discussion of applicable thresholds of significance and significance determination follow.

The BAAQMD CEQA Air Quality Guidelines were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and greenhouse gas emissions. These thresholds are designed to establish the level at which the Applicant believed air pollution emissions would cause significant environmental impacts under CEQA.

Table 5. BAAQMD Regional (Mass Emission) Criteria Air Pollutant Significance Thresholds

Pollutant	Construction Phase		Operational Phase
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x)	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	82 (exhaust)	54	10
PM ₁₀ and PM _{2.5} Fugitive Dust	Best Management Practices	None	None

Sources: BAAQMD 2017a

Projects that do not exceed the emissions in Table 5 would not cumulatively contribute to health effects in the Air Basin. If projects exceed the emissions in Table 5, emissions would cumulatively contribute to the nonattainment status and would contribute to elevating health effects associated with these criteria air

pollutants. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with particulate matter include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would further contribute to reducing possible health effects related to criteria air pollutants.

However, for projects that exceed the emissions in Table 5, it is speculative to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment since mass emissions are not correlated with concentrations of emissions or how many additional individuals in the air basin would be affected by the health effects cited above. The Air District is the primary agencies responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the Air Basin and at the present time, it has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health in order to address the issue raised in *Sierra Club v. County of Fresno (Friant Ranch, L.P.) (2018) 6 Cal.5th 502, Case No. S21978* (Friant Ranch).

Ozone concentrations are dependent upon a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the NAAQS and CAAQS, it is speculative to link health risks to the magnitude of emissions exceeding the significance thresholds. To achieve the health-based standards established by the EPA, the air districts prepare air quality management plans that details regional programs to attain the AAQS. However, if a project within the Air District exceeds the regional significance thresholds, the project could contribute to an increase in health effects in the basin until such time the attainment standards are met in the Air Basin.

Congested intersections have the potential to create elevated concentrations of CO, referred to as CO hotspots. The significance criteria for CO hotspots are based on the California AAQS for CO, which are 9.0 ppm (8-hour average) and 20.0 ppm (1-hour average). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology, the SFBAAB is in attainment of the California and National AAQS, and CO concentrations in the SFBAAB have steadily declined. Because CO concentrations have improved, the BAAQMD does not require a CO hotspot analysis if the following criteria are met (CARB 2014):

- The project is consistent with an applicable congestion management program established by the County Congestion Management Agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans.
- The project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project traffic would not increase traffic volumes at affected intersection to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

5.1.1 Toxic Air Contaminants

The BAAQMD's significance thresholds for local community risk and hazard impacts apply to both the siting of a new source and to the siting of a new receptor. Local community risk and hazard impacts are associated with TACs and PM_{2.5} because emissions of these pollutants can have significant health impacts at the local level. The proposed project would generate TACs and PM_{2.5} during construction activities that

could elevate concentrations of air pollutants at the nearby residential, day care, and school-based sensitive receptors. The thresholds for construction-related local community risk and hazard impacts are the same as for project operations. BAAQMD has adopted screening tables for air toxics evaluation during construction (CARB 2017b). Construction-related TAC and PM_{2.5} impacts should be addressed on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and proximity to off-site and on-site receptors, as applicable (CARB 2018).

Project-level emissions of TACs or PM_{2.5} from individual sources that exceed any of the thresholds listed below are considered a potentially significant community health risk:

- An excess cancer risk level of more than 10 in one million, or a noncancer (i.e., chronic or acute) hazard index greater than 1.0 would be a significant project contribution.
- An incremental increase of greater than 0.3 micrograms per cubic meter (µg/m³) annual average PM_{2.5} from a single source would be a significant project contribution.

Cumulative sources represent the combined total risk values of each of the individual sources within the 1,000-foot evaluation zone. A project would have a cumulative considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius from the fence line of a source or location of a receptor, plus the contribution from the project, exceeds any of the following:

- An excess cancer risk level of more than 100 in one million or a chronic noncancer hazard index (from all local sources) greater than 10.0.
- 0.8 µg/m³ annual average PM_{2.5}.

In February 2015, Office of Environmental Health Hazard Assessment (OEHHA) adopted new health risk assessment guidance that includes several efforts to be more protective of children's health. These updated procedures include the use of age sensitivity factors to account for the higher sensitivity of infants and young children to cancer causing chemicals, and age-specific breathing rate (OEHHA 2015).

5.2 Greenhouse Gases

Consistent with Appendix G of the State CEQA Guidelines, a project would have a significant GHG impact if it would:

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

State CEQA Guidelines Section 15064.4 recommends that lead agencies quantify GHG emissions projects and consider several other factors that may be used in the determination of significance of project-related GHG emissions, including: the extent to which the project may increase or reduce GHG emissions; whether the project exceeds an applicable significant threshold; and the extent to which the project complies with the regulations or requirements adopted to implement a reduction or mitigation of GHG.

Section 15064.4 does not establish a threshold of significance. Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look at thresholds developed by other public agencies, or suggested by

other experts, such as the CAPCOA, as long as any threshold chosen is supported by substantial evidence (see State CEQA Guidelines Section 15064.7(c)). The State CEQA Guidelines also clarify that the events of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see State CEQA Guidelines Section 15130(f)). It is noted that the State CEQA Guidelines were amended in response to SB 97. In particular, the State CEQA Guidelines were amended to specify that compliance with the GHG emissions reduction plan renders a cumulative impact less than significant.

Per State CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions" (14 CCR Section 15064(h)(3)). Put another way, State CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies, and/or other regulatory strategies to reduce GHG emissions.

Although GHG emissions can be quantified, CARB, BAAQMD, and the County have not adopted quantitative project-level significance thresholds for GHG emissions that would be applicable to the project. Per State CEQA Guidelines Section 15064.4(b), "in determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions." When determining the significance of GHG impacts, lead agencies should consider the project's impact as compared to the existing environmental setting, whether the project exceeds a threshold of significance, and compliance with relevant GHG-related plans (see, for example, State CEQA Guidelines Section 15064.4(b)). Regarding the latter criterion, lead agencies should consider "the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, for example, State CEQA Guidelines Section 15183.5(b)). Per State CEQA Guidelines Section 15064.4(b)(3), such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG emissions.

For the project, no quantitative threshold has been adopted to evaluate significance for GHG emissions to address the State's more recent GHG-reduction target of achieving carbon neutrality by 2045, per Executive Order B-55-18 (2018). To achieve carbon neutrality by 2045, it is recommended that future development include measures to support building decarbonization, including the replacement of natural gas service with other alternatives, such as use of electrically-powered equipment (CARB 2022b, CEC 2021). Based on recent GHG threshold updates and supportive documentation prepared by the Bay Area Air Quality Management District (BAAQMD), it is recommended that future development prohibit the installation of natural gas infrastructure/use of natural-gas fired appliances, to the maximum extent possible, and incorporate electric-vehicle charging stations beyond what is required by current building standards in order to contribute its "fair share" of what would be required for the State to achieve its carbon neutrality goal (BAAQMD 2022). As a result, project-generated GHG emissions would also be considered to have a potentially significant impact if the project would not prohibit the installation of natural gas fired appliances/equipment, to the maximum extent possible, or encourage the installation of electric-vehicle charging stations beyond what is required by current building standards. As an additional

significance criterion, consistency with the applicable plans and policies to reduce GHG emissions, including the emissions reduction policies, strategies, and measures discussed within CARB's Climate Change Scoping Plan, was additionally evaluated.

6 METHODOLOGY

This analysis focuses on the potential change in the air quality environment due to implementation of the project. Air pollution emissions would result from both construction and operation of the project. Specific methodologies used to evaluate these emissions are discussed below.

The analysis is based on project specifics and default values in the latest versions of CalEEMod. Accordingly, this analysis has been conducted with the most recent available tools prepared and accepted by the regulatory agencies.

6.1 Construction Emissions

The project's emissions will be evaluated based on significance thresholds established by BAAQMD, as discussed above. Daily emissions during construction are estimated by assuming a conservative construction schedule and applying the multiple source and fugitive dust emission factors derived from the BAAQMD-recommended CalEEMod latest version. Details of the modeling assumptions and emission factors are provided in Appendix B. The calculations of the emissions generated during project construction activities reflect the types and quantities of construction equipment that would be used to complete the project.

6.1.1 Construction Assumptions

Construction emissions associated with the project, including emissions associated with the operation of off-road equipment, haul-truck trips, on-road worker vehicle trips, vehicle travel on paved and unpaved surfaces, and fugitive dust from material handling activities, were calculated using CalEEMod version 2022.1 (CAPCOA 2022). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation of a variety of land use projects. The model uses widely accepted federal and state models for emission estimates and default data from sources such as EPA AP-42 emission factors, CARB vehicle emission models, and studies from California agencies such as CEC. The model quantifies direct emissions from construction and operations, as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model was developed in collaboration with the air districts in California. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions.

Emissions modeling included emissions generated during the project have been grouped into six phases in CalEEMod based on the types of equipment and workload: 1) demolition (including removal of the existing impervious surface of approximately 20,840 cubic yards and tree removal/wood chip dispersion); 2) site preparation (including site clearing, leveling, and transport of building materials); 3) grading (excavation, import approximately 7,500 cubic yards of fill); 4) building construction (including surveying, excavation/leveling for foundations, hydrostatic testing, watermain connections tested and connected, utility trenches, importation of building materials for residential buildings and the Community Building, all building construction); 5) paving (paving of onsite parking and roads and site concrete (curb,

gutter, flatwork, etc.)); and 6) finishing (including finishing activities, architectural coatings, final landscaping, and removal of temporary fencing and erosion control). The project is within a 11.02-acre parcel, however, the total acres involved for the Cypress Point Housing development totals approximately 5 acres. Two CalEEMod land uses were utilized ‘Residential – Condo/Townhouse’ for the 71 dwelling units and ‘Parking – Parking lot’ for the 142 parking spots. This analysis includes quantification of construction and operation off-road equipment, fugitive dust, and on-road mobile sources, as well as the operational emissions for the affordable housing units.

Modeling input data were based on this anticipated construction schedule and phasing. Construction equipment and usage required for each phase were obtained using CalEEMod defaults for the land use types which make up the project site, information provided by Midpen, and default parameters contained in the model for the project site (San Mateo County) and land uses. The construction duration is assumed to be approximately 18 months, from December 2024 until June 2026. Project construction would consist of different activities undertaken in phases, through to the operation of the project. Typical construction equipment would be used during all phases of project construction and would be stored within the staging area, potentially including dozers, backhoes, graders, and excavators. Table 6 shows the project’s anticipated construction schedule, presents an estimate of the maximum number of pieces of equipment for each construction phase, and assumes equipment would be operating 5 days per week for the construction phase duration. The construction emissions were mitigated in the CalEEMod model to comply with any BAAQMD measures and mitigation measures identified in the 2018 Report.

Table 6. Construction Anticipated Schedule, Trips, and Equipment

Phase (Duration)	Equipment Used			Daily Vehicle Trips
	Type	Number	Hours/Day	
1. Demolition 12/1/2024–1/17/2025 (35 working days)	Tractors/Loaders/Backhoes	5	8	40 one-way worker trips
	Concrete/Industrial Saws	2	8	6 one-way vendor trips
	Excavators	5	8	60 one-way haul truck trips 2 miles of onsite truck travel
2. Site Preparation 1/18/2025–2/15/2025 (20 working days)	Rubber Tired Dozers	2	5	40 one-way worker trips 6 one-way vendor trips
	Tractors/Loaders/Backhoes	3	8	300 one-way haul truck trips 2 miles of onsite truck travel
3. Grading 2/16/2025–4/05/2025 (35 working days)	Scrapers	2	8	
	Compactor	1	8	40 one-way worker trips
	Dump/Tenders	1	8	6 one-way vendor trips
	Off-Highway Truck	1	8	18 one-way haul truck trips
	Graders	1	8	2 miles of onsite truck travel
4. Building Construction 3/1/2025–3/29/2026 (280 working days)	Cranes	1	7	
	Forklifts	3	8	78 one-way worker trips
	Generator Sets	1	8	8 one-way vendor trips
	Tractors/Loaders/Backhoes	3	7	20 one-way haul truck trips
	Welders	1	8	3 miles of onsite truck travel

5. Paving 3/2/2026–6/20/2026 (80 working days)	Pavers	3	8	
	Tractors/Loaders/Backhoes	1	8	
	Rollers	2	8	40 one-way worker trips
	Grader	1	1	6 one-way vendor trips
	Off-Highway Truck	1	8	2 one-way haul truck trips
	Scraper	1	1	2 miles of onsite truck travel
	Compactor	1	1	
6. Finalization 5/10/2026–6/20/2026 (30 working days)	Air Compressors	1	6	10 one-way worker trips
				2 one-way vendor trips
				0 one-way haul truck trips
				1 miles of onsite truck travel

Notes: For the parameters that are not provided in the table (e.g., equipment horsepower and load factor, on-road trip lengths), CalEEMod defaults were used.

6.2 Operational Emissions

Once construction is completed the project would be an operational affordable housing community. Criteria pollutant and GHG emissions from the operations of the affordable housing community were estimated using CalEEMod Version 2022.1. Year 2027 was assumed as the first full year of operations after completion of construction. The operational emissions were calculated based on CalEEMod defaults associated with the project's land use types, removing any natural gas processes. Analysis of the project's likely impact on regional air quality during project operation takes into consideration three types of sources: 1) area, 2) energy, and 3) mobile.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating, water heating, and stoves are not calculated as part of building energy use in CalEEMod since the project will not include any natural gas.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2022). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential and nonresidential buildings and on the default factor of pounds of VOC per building square foot per day. For parking lot land uses, CalEEMod estimates VOC emissions associated with use of parking surface degreasers based on a square footage of parking surface area and pounds of VOC per square foot per day.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers using during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of residential and nonresidential surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings, and SCAQMD's Rule 1113 (Architectural Coatings) governs the VOC content for interior and exterior coatings. The model default reapplication rate of 10% of area per year is assumed. Architectural coating for the parking surface area was also estimated with CalEEMod defaults.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. For San Mateo County, the average annual “summer” days are estimated to 180 days; and it is assumed that landscaping equipment would operate 180 days per year in CalEEMod. Emissions associated with potential landscape maintenance equipment were included and no emission reduction features related to electric landscape equipment were assumed, to conservatively capture potential project operational emission sources.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building and parking lot electricity. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off-site.

Mobile Sources

The project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of project operations. Emissions from mobile sources during operation of the project were estimated using CalEEMod default trip rates, trip lengths, fleet mix, and emissions factors for each vehicle.

6.3 Greenhouse Gas

This analysis quantifies the project’s total annual GHG emissions from construction, taking into account any GHG emission reduction measures that would be incorporated into the project’s design. However, given the lack of a formally adopted numerical significance threshold or a formally adopted local plan for reducing GHG emission applicable to this project, this analysis evaluates the significance of the project’s GHG emission by assessing the project’s consistency with regulatory schemes and policies.

6.4 Toxic Air Contaminants Impacts (Construction and Operations)

Potential TAC impacts were evaluated in this analysis and in the 2018 Report by conducting a qualitative analysis consistent with the CARB Handbook (2005) and BAAQMD guidance, followed by a more detailed analysis (i.e., dispersion modeling). Although consistent with TAC-related rules and regulations, due to the project location a health risk assessment was conducted for construction DPM and PM_{2.5}. The health risk assessment modeling is discussed in greater detail in the 2018 Report (Appendix A).

7 IMPACT ANALYSIS

Impact AQ-1 Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The 2017 Clean Air Plan is the current applicable regional Air Quality Plan (AQP) for the Air Basin (BAAQMD 2017). The primary goals of the 2017 Clean Air Plan are to protect public health and protect the climate, and the plan acknowledges that the BAAQMD’s two stated goals of protection are closely related. As such, the 2017 Clean Air Plan identifies a wide range of control measures intended to decrease both criteria pollutants and GHG emissions. The development of the project would

improve the jobs/housing balance and jobs/housing fit by providing preference for those who live or work on the San Mateo Coast, redistributing existing county residences and reducing distances traveled between work and home. The proposed project does not involve employment growth. Determining consistency with the 2017 Clean Air Plan involves assessing whether applicable control measures contained in the 2017 Clean Air Plan are implemented and whether implementation of the proposed project would disrupt or hinder implementation of AQP control measures. The control measures are organized into five categories: 1) stationary and area source control measures; 2) mobile source measures; 3) transportation control measures; 4) land use and local impact measures; and 5) energy and climate measures. The control measures are geared toward traditional land uses (e.g., residential, commercial, industrial uses) and buildings. None of the control measures contained in the 2017 Clean Air Plan are applicable to the project; however, all projects within BAAQMD's jurisdiction are required to implement the BAAQMD Best Management Practices (BMPs) during construction activities. As discussed in below, the proposed project would implement all BMPs for construction activities and would be consistent with the assumptions in the AQP. Furthermore, the proposed project would not include any special features that would disrupt or hinder implementation of the AQP control measures. Therefore, the proposed project would not obstruct implementation of the 2017 Clean Air Plan.

Furthermore, the thresholds of significance, adopted by BAAQMD, determine compliance with the goals of attainment plans in the region. As such, emissions below the BAAQMD significance thresholds would not conflict with or obstruct implementation of the applicable air quality plans. As Table 7, Table 8, and Table 9 shows, the emissions from project construction and operations are below the thresholds of significance; therefore, the project does not conflict with implementation of the BAAQMD applicable air quality plans.

Impact AQ-2 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact with Mitigation. The BAAQMD's thresholds of significance represent the allowable emissions a project can generate without generating a cumulatively considerable contribution to regional air quality impacts. Therefore, a project that would not exceed the BAAQMD thresholds of significance on a project level also would not be considered to result in a cumulatively considerable contribution to these regional air quality impacts. The region is in non-attainment for federal and state ozone standards, state PM₁₀ standards, and federal and state PM_{2.5} standards. Impacts related to construction and operation of the proposed project are addressed separately below.

Construction

The project implementation would generate emissions of criteria air pollutants during construction. The estimated unmitigated emissions from construction of the project are summarized in Table 7. The detailed assumptions and calculations, as well as CalEEMod outputs are provided in Appendix B of this report.

Table 7. Unmitigated Construction Emissions Summary

Construction Year	Unmitigated Construction Emissions Summary					
	ROG	NOx	CO	PM ₁₀	PM _{2.5}	SO ₂
Pollutant Emission (pounds per day)						
2024 Peak Daily Emission	1.71	21.83	24.87	5.69	1.34	0.08
2025 Peak Daily Emission	5.01	53.11	47.43	19.37	7.00	0.30
2026 Peak Daily Emission	33.50	24.40	32.67	8.98	1.86	0.07
BAAQMD Significance Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A
Pollutant Emission (tons per year)						
2024 Max Annual	0.02	0.24	0.27	0.01	0.01	0.001
2025 Max Annual	0.24	2.70	2.97	0.08	0.29	0.01
2026 Max Annual	0.58	0.88	1.18	0.03	0.07	0.002
BAAQMD Significance Thresholds	10	10	N/A	15	10	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

Source: Emissions were quantified using CalEEMod version 2022.1 (CAPCOA 2022).

NA = Not applicable, no threshold

Model results (summer, winter, and annual) and assumptions are provided in Appendix B.

As Table 7 shows, estimated unmitigated construction emissions for all pollutants are below BAAQMD significance thresholds. The combined construction emissions from all components of the proposed project are below the recommended BAAQMD thresholds of significance. Therefore, project construction would have a less-than-significant impact. However, mitigation measures and BMPs have been included to further reduce localized impacts. The estimated mitigated emissions from construction of the project are summarized in Table 8.

Table 8. Mitigated Construction Emissions Summary

Construction Year	Mitigated Construction Emissions Summary					
	ROG	NOx	CO	PM ₁₀	PM _{2.5}	SO ₂
Pollutant Emission (pounds per day)						
2024 Peak Daily Emission	1.71	21.83	24.87	3.30	1.08	0.08
2025 Peak Daily Emission	5.01	53.11	47.43	10.80	4.19	0.30
2026 Peak Daily Emission	2.80	24.40	32.67	3.92	1.35	0.07
BAAQMD Significance Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A
Pollutant Emission (tons per year)						
2024 Max Annual	0.02	0.24	0.27	0.04	0.01	0.001
2025 Max Annual	0.24	2.70	2.97	0.50	0.18	0.01
2026 Max Annual	0.58	0.88	1.18	0.14	0.05	0.002

BAAQMD Significance Thresholds	10	10	N/A	15	10	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

Source: Emissions were quantified using CalEEMod version 2022.1 (CAPCOA 2022).

NA = Not applicable, no threshold

Model results (summer, winter, and annual) and assumptions are provided in Appendix B.

As presented above, the project would not violate any air quality significance thresholds or contribute substantially to an existing or projected air quality violation. The impact is less than significant, and no mitigation required. However, for all proposed projects, the BAAQMD recommends the implementation of BMPs, whether or not construction-related emissions exceed applicable thresholds of significance. In addition, the 2018 Report identified several other basic measures to control dust and exhaust during construction as part of Mitigation Measure AQ-1. As such, to ensure construction emission impacts are less than significant, the proposed project would apply the following mitigation measures during construction activities:

Mitigation Measure AQ-1: During any construction period ground disturbance, the applicant shall ensure that the project contractor implements measures to control dust and exhaust. MidPen will include terms in all construction contracts related to the Cypress Point project that require contractors to implement the following best management practices:

- Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, unpaved access roads) shall be watered with non-potable water two times per day.
- All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All roadways, driveways, and sidewalks shall be paved as soon as possible.
- Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure in Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours of a complaint or issue notification. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

Implementation of Mitigation Measure AQ-1 would ensure that the recommended BAAQMD best management practices are instated, which the BAAQMD considers sufficient to reduce this impact to a level of less than significant.

To reduce localized impacts from DPM and PM_{2.5} to less than significant the 2018 Report included Mitigation Measure AQ-2 to lower diesel particulate matter exhaust emissions from construction equipment. Again, to ensure construction emission impacts are less than significant, the proposed project would apply the following mitigation measures during construction activities:

Mitigation Measure AQ-2: Use Construction equipment that has low diesel particulate matter exhaust emissions.

- Prior to initiating any construction activities, MidPen or their contractors shall develop a plan demonstrating that the off-road equipment used to on-site to construct the project would achieve a fleet-wide average of at least 78 percent reduction in DPM emissions compared to the emissions calculated for the project without mitigation. One feasible plan to achieve this reduction would include the following: All mobile diesel-powered off-road equipment larger than 25 hp and operating on the site for more than two days shall meet, at a minimum, U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent. Note that the construction contractor could use other measures to minimize construction period DPM emission to reduce the estimated cancer risk below the thresholds. The use of equipment that meets U.S. EPA Tier 2 standards and includes CARB-certified Level 3 Diesel Particulate Filters or alternatively-fueled equipment (i.e., non-diesel) would meet this requirement. Other measures may be the use of added exhaust devices, or a combination of measures, provided that these measures are approved by the County and demonstrated to reduce community risk impacts to less than significant.

The effectiveness of proposed mitigation measures to reduce impacts related to community risk was evaluated by comparing DPM and PM_{2.5} emissions between the unmitigated and mitigated CalEEMod runs and estimating mitigated risk values based on the unmitigated ISCST3 run (see Attachment 2 of the 2018 Report for risk calculations). The updated and current CalEEMod model results completed as part of this assessment are comparable to the 2018 Report CalEEMod model results. In the 2018 Report, with mitigation, the computed maximum increased lifetime residential cancer risk from construction, assuming infant exposure, would be 7.3 in one million or less, and the maximum annual PM_{2.5} concentration would be than 0.1 µg/m³. The cancer risk would be below the BAAQMD threshold of 10 in one million for cancer risk and the annual PM_{2.5} concentration would be below the BAAQMD threshold of 0.3 µg/m³. After implementation of these recommended measures, the project would have a less than- significant impact with respect to community risk caused by construction activities.

Operations

Project operations would generate VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions from mobile sources, including vehicle trips; area sources, including the use of consumer products, architectural coatings for repainting, and landscape maintenance equipment, water, waste, and energy sources. The estimated emissions from operation of the project are summarized in Table 9. Complete details of the emissions calculations are provided in Appendix B.

Table 9. Unmitigated Operational Emissions Summary

Operation Year 2027	Unmitigated Operational Emissions Summary					
	ROG	NOx	CO	PM ₁₀	PM _{2.5}	SO ₂
Pollutant Emission (pounds per day)						
Mobile	1.78	1.60	20.60	2.39	0.44	0.06
Area	2.05	0.039	4.03	0.001	0.002	0.0002
Energy	0	0	0	0	0	0
Total	3.83	1.64	24.62	2.39	0.44	0.06
BAAQMD Significance Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A
Pollutant Emission (tons per year)						
Mobile	0.28	0.29	3.08	0.39	0.07	0.01
Area	0.34	0.003	0.36	0.0001	0.0002	0.00002
Energy	0	0	0	0	0	0
Total	0.62	0.30	3.44	0.39	0.07	0.01
BAAQMD Significance Thresholds	10	10	N/A	15	10	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

Source: Emissions were quantified using CalEEMod version 2022.1 (CAPCOA 2022).

NA = Not applicable, no threshold

Model results (summer, winter, and annual) and assumptions are provided in Appendix B.

As Table 9 shows, estimated unmitigated operational emissions for all pollutants are below BAAQMD significance thresholds. Also, project operations would meet the BAAQMD CO hotspot analysis screening criteria regarding traffic volumes at any affected intersection. Therefore, the proposed project would not need a CO hotspot analysis. Therefore, based on the above criteria, the proposed project would have a less-than-significant impact related to CO hotspots.

The combined construction emissions and combined operational emissions from all components of the proposed project are below the recommended BAAQMD thresholds of significance. Therefore, the project would not be anticipated to exceed any significance threshold and would have a less than significant contribution to cumulative impacts with mitigation.

Impact AQ-3 Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact with Mitigation. While criteria pollutants (such as particulate matter (PM₁₀ and PM_{2.5}) are a concern at the regional level, community risk impacts from TACs and annual PM_{2.5} exposure to nearby sensitive receptors are also a localized concern. While the discussion under Impact AQ-3 above addressed PM at the regional level, this impact addresses PM at the localized level. Impacts related to increased community risk can occur either by introducing new sensitive receptors, such as residences, in proximity to existing sources of TACs or by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity.

The BAAQMD CEQA Air Quality Guidelines recommends using a 1,000-foot screening radius around a project site for purposes of identifying community health risk from siting a new sensitive receptor or a

new source of TACs. Operation of the project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy air pollutant levels, because no stationary sources of TACs, such as generators, are proposed as part of the project. However, the proposed project would introduce new sensitive receptors to the area in the form of future residences, which could be exposed to existing sources of TACs. Project-related construction activity would temporarily generate dust and equipment exhaust that could affect nearby sensitive receptors that include residences.

This analysis therefore evaluates the following community risk impacts:

- Exposure of project residents to existing mobile sources of TACs;
- Exposure of project residents to existing stationary sources of TACs;
- Exposure of nearby existing residences to project construction-related TACs.

BAAQMD provides a Highway Screening Analysis tool that uses Google Earth to identify estimated risk and hazard impacts from highways throughout the Bay Area. Cancer risk, chronic and acute hazard index (HI), and annual PM_{2.5} values at various distances are estimated for different highway segments (as described in detail in Attachment 1 of the 2018 Report). The tool uses the average annual daily traffic (AADT) count, fleet mix and other modeling parameters specific to that segment of the highway. Impacts from traffic on SR-1 (Link 41, at 6 feet of elevation), which is 150 feet or greater west of the project site, were identified using this tool. The estimated cancer risk was adjusted using a factor of 1.3744 to account for new OEHHA guidance (see Attachment 1 of the 2018 Report). This factor was provided by BAAQMD for use with their CEQA screening tools. In 2018, the cancer risk at the project site was found to be 5.9 in a million, which is below the significance threshold of 10 in one million. The PM_{2.5} concentration was found to be 0.06 µg/m³, which is below the significance threshold of 0.3 µg/m³, and the HI is 0.01, which is below the significance threshold of 1.0. This would be a less-than-significant impact and no mitigation is required.

The locations of any permitted stationary sources of air pollution near the project site were identified using BAAQMD's Stationary Source Risk & Hazard Analysis Tool, a mapping tool that uses Google Earth. This tool identified the location of one stationary source and its estimated risk and hazard screening values. The 2012 estimated risk values were adjusted using the factor of 1.3744 described above under Mobile Sources. The risk values were then adjusted with the appropriate distance multiplier values provided by BAAQMD.

- Plant 14546, which is an emergency back-up generator operated by Sewer Authority Mid-Coast, located at 16th Street and Cabrillo Highway, is approximately 450 feet north-west of the project site. At BAAQMD's direction, risk and PM_{2.5} concentrations from the facility were adjusted based on BAAQMD's Distance Adjustment Multiplier Tool for Diesel Internal Combustion Engines. According to the BAAQMD screening data (and adjusted for the 450-foot distance and 2015 OEHHA methodology), this facility would result in an adjusted lifetime cancer risk of 2.9 in one million, PM_{2.5} concentration of <0.01 µg/m³, and <0.01 HI, which would all be below BAAQMD thresholds of significance. This would be a less-than-significant impact and no mitigation is required.

Community risk impacts on project residents from combined sources are reported in Table 3 of the 2018 Report. As shown in Table 3 of the 2018 Report, risk from combined operational TAC sources at the project site would be below the BAAQMD cumulative thresholds of 100 in one million and 0.8 µg/m³, respectively. Hazard index (HI) would also be cumulatively less than significant. This would be a less-than significant impact and no mitigation is required.

Construction activities, particularly during site preparation and grading would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices are employed to reduce these emissions. Mitigation Measure AQ-1 would implement BAAQMD-required best management practices.

Construction equipment and associated heavy-duty truck traffic also generates diesel exhaust, which is a known TAC. Construction exhaust emissions may pose community risks for sensitive receptors such as nearby residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A community risk assessment of the project construction activities was conducted to evaluate potential health effects on sensitive receptors at these nearby residences from construction emissions of DPM and PM_{2.5}. The closest sensitive receptors to the project site are located adjacent to the north, east and south sides of the project site (see Figure 1 of the 2018 Report). Emissions and dispersion modeling was conducted to predict the off-site DPM concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

In 2018, CalEEMod calculated construction emissions were input to the U.S. EPA ISCST3 dispersion model with project and receptor coordinates and meteorological data. DPM and PM_{2.5} concentrations at modeled receptor locations were then used to estimate community risk impacts (cancer risk, annual PM_{2.5} concentration and hazard index) from project construction using the detailed methodology contained in Attachment 1 of the 2018 Report (Appendix A).

The 2018 CalEEMod model estimated total annual PM₁₀ exhaust emissions (assumed to be DPM) from off-road construction equipment and from on-road vehicles (haul truck travel during demolition, worker travel, and vendor deliveries during construction). An average trip length of 0.5 mile was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction site. In 2018, total emissions of PM₁₀ exhaust from all stages of project construction were estimated to be 0.217 tons (434 pounds). Total emissions of fugitive PM_{2.5} dust emissions from all stages of project construction were estimated to be 0.105 tons (210 pounds). This analysis updated the CalEEMod model utilizing the most recent version CalEEMod and project assumptions. The total emissions of PM₁₀ exhaust from all stages of project construction and total miles traveled were estimated to be 0.140 tons (280 pounds). When including total emissions of PM₁₀ exhaust from all stages of project construction and emissions emitted within 0.5 miles of the project, PM₁₀ exhaust emissions were estimated to be 0.137 tons (274 pounds). The total fugitive PM_{2.5} dust emissions from all stages of project construction and total miles traveled were estimated to be 0.114 tons (228 pounds). When including total fugitive PM_{2.5} dust emissions from all stages of project construction and emissions emitted within 0.5 miles of the project, PM_{2.5} emissions were estimated to be 0.080 tons (160 pounds). The current CalEEMod-estimated emissions are similar to the 2018 Report CalEEMod-estimated emissions utilized in EPA ISCST3 dispersion model. Therefore the 2018 Report annual DPM and PM_{2.5} concentrations at neighboring residences from construction activities during the expected 2018 – 2019 construction period calculated using the U.S. EPA ISCST3 dispersion model are utilized to determine significance in this analysis. All ISCST3 modeling assumptions and details are in Attachment 1 of the 2018 Report.

The maximum concentrations occurred at a residence adjacent to the northern boundary of the project site at the 1.5-meter receptor height. Using the maximum annual modeled DPM concentrations, the maximum increased cancer risk at the location of the maximally exposed individual (MEI) was calculated using

BAAQMD-recommended methods. The cancer risk calculations are based on applying the BAAQMD recommended age sensitivity factors to the TAC concentrations. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. BAAQMD-recommended exposure parameters were used for the cancer risk calculations, as described in Attachment 1 of the 2018 Report. To be conservative, infant and adult exposures were assumed to occur at all residences through the entire construction period. Results of this assessment indicate that the maximum increased residential cancer risks would be 45.9 in one million for an infant exposure and 0.8 in one million for an adult exposure. The maximum residential excess cancer risk would be above the significance threshold of 10.0 in one million, so this impact would be significant. Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce this impact to less than significant.

The maximum-modeled annual $PM_{2.5}$ concentration, which is based on combined exhaust and fugitive dust emissions, was $0.41 \mu\text{g}/\text{m}^3$. This maximum annual $PM_{2.5}$ concentration would be above the BAAQMD significance threshold of greater than $0.3 \mu\text{g}/\text{m}^3$. The location of the receptor with the maximum $PM_{2.5}$ concentration is at the same as where the maximum TAC impact would occur. Implementation of Mitigation Measures AQ-1 and Mitigation Measure AQ-2 would reduce this impact to less than significant.

The maximum modeled annual residential DPM concentration (i.e., from construction exhaust) was $0.16 \mu\text{g}/\text{m}^3$. The maximum computed HI based on this DPM concentration was 0.03, which is lower than the BAAQMD significance criterion of a HI greater than 1.0. This would be a less than- significant impact and no mitigation is required.

The cumulative impacts of TAC emissions from three sources (construction of the project, the nearby stationary source, and traffic on SR-1) on the construction MEI are summarized in Table 4 of the 2018 Report. As shown in Table 4, the sum of impacts from combined sources at the construction MEI would be below the BAAQMD threshold, and therefore would be less than significant.

The project would have a significant impact with respect to community risk caused by project construction activities, since estimated cancer risk and $PM_{2.5}$ concentrations are above the single source thresholds of 10.0 per million for cancer risk and a concentration of greater than $0.3 \mu\text{g}/\text{m}^3$ for annual $PM_{2.5}$. Implementation of Mitigation Measures AQ-1 and Mitigation Measure AQ-2 would reduce this impact to less than significant. Attachment 2 of the 2018 Report (Appendix A) includes the emission calculations and source information used in the modeling and the cancer risk calculations. Appendix B provides the updated CalEEMod assumptions and emissions.

Appendix C contains two CalEEMod model runs demonstrating the project's ability to meet the Mitigation Measure AQ-2, which requires that prior to initiating any construction activities, MidPen or their contractors shall develop a plan demonstrating that the off-road equipment used on-site to construct the project would achieve a fleet-wide average of at least 78 percent reduction in DPM emissions compared to the emissions calculated for the project without mitigation (434 pounds of DPM emissions). There are several options outlined in the mitigation measure including: all mobile diesel-powered off-road equipment larger than 25 hp and operating on the site for more than two days shall meet, at a minimum, U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent; the use of equipment that meets U.S. EPA Tier 2 standards and includes CARB-certified Level 3 Diesel Particulate Filters; or alternatively-fueled equipment (i.e., non-diesel). The first CalEEMod model in Appendix C utilizes Tier 4 interim engines for all mobile diesel-powered off-road equipment larger than 25 hp and operating on the site for more than two days and reduced DPM by 79.8%. The second CalEEMod model in Appendix C utilizes Tier 2 standards and includes CARB-certified Level 3 Diesel Particulate Filters for all mobile diesel-powered off-road equipment larger than 25 hp and operating on the site for more than two days and

reduced DPM by 79.0%. Therefore, implementation of Mitigation Measures AQ-1 and Mitigation Measure AQ-2 would reduce this impact to less than significant.

Impact AQ-4 Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The project would not be a source of any odors during operations. During construction, a limited number of diesel engines would be operated on the project site for limited durations. Diesel exhaust and volatile organic compounds (VOCs) from these diesel engines would be emitted during construction of the proposed project, which are objectionable to some; however, the duration of construction activities is expected to last approximately 18 months, emissions would disperse rapidly from the project site, and diesel exhaust odors would be consistent with existing vehicle odors in the area. Considering this information, construction and operation of the proposed project would not create other emissions or odors adversely affecting a substantial number of people; impacts would be less than significant.

Impact GHG-1 Would the project generate GHG emissions, either directly or indirectly, that may have an adverse effect on the environment?

Less Than Significant Impact. The proposed project is located in the San Francisco Bay Area Air Basin, which is regulated by the BAAQMD. Projects generate GHG emissions during construction and operation (e.g., mobile emissions, emissions from generation of electricity for operations), and projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b). On April 20, 2022, the BAAQMD adopted changes to its thresholds for evaluating the significance of climate impacts from land use projects and plans under CEQA. In place of numerical thresholds, the focus will be on the design of a project as well as building operations and transportation. At a minimum, building projects cannot include natural gas appliances or natural gas plumbing, and cannot result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and State CEQA Guidelines Section 15126.2(b). The project will not utilize natural gas and will not result in any wasteful, inefficient, or unnecessary energy usage. The project operations must also achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan or meet a locally adopted VMT target, and VMT thresholds for unincorporated areas of San Mateo County are determined on a case-by-case basis. The project would incorporate VMT reductions and the below market rate housing provides greater opportunity for lower income families to live closer to job centers and achieve a jobs/housing match near transit. It is also an important strategy to address the limited availability of affordable housing that might force residents to live far away from jobs or school, requiring longer commutes. Therefore, construction- and operation-related GHG emissions would be less than significant.

Impact GHG-2 Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Less Than Significant Impact. The San Mateo County Community Climate Action Plan (CCAP) was approved and adopted as an element of the San Mateo County General Plan in 2022. The CCAP outlines actionable items that, if successfully implemented, would achieve a 45% reduction of greenhouse gas (GHG) emissions over 1990 levels by 2030 and carbon neutrality by 2040. The project is an affordable housing project with several implementation action items related to energy, transportation, and waste. The project includes installation of rooftop solar panels, 5 electric vehicle charging spaces, water-efficient appliances, including high efficiency washers with a water factor of 5 or less, toilets that use less than 1.6

gallons per flush in all residential units, and metering or self-closing faucets in all non-residential lavatories. The project's irrigation system would include an automatic weather-based controller, manual shut-off valves, matched precipitation rate sprinkler heads, a proper setback from non-permeable surfaces, and separate valves for different hydrozones. It would be designed to prevent runoff, low head drainage, and overspray. There is also no natural gas as part of the project. Therefore, the project would not conflict with the policies, regulations, or guidelines in the General Plan, CCAP, Bay Area Clean Air Plan, or any other applicable plans and/or regulations adopted for the purposes of reducing GHG emissions. Furthermore, GHG emissions from the project, as shown Appendix B, would not generate substantial GHG emissions during construction or operation. Therefore, impacts would be less than significant.

Construction of the project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. The BAAQMD does not have current GHG significance thresholds, however construction emissions were calculated and amortized over a 30-year project lifetime. CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described. Construction of the project is anticipated to last a total of approximately eighteen months. On-site sources of GHG emissions include off-road equipment and off-site sources including vendor trucks and worker vehicles. Table 10 presents construction emissions for the project from on-site and off-site emission sources.

Table 10. Estimated Annual Construction Greenhouse Gas Emissions

Construction Years	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Metric Tons per Year			
2024	80.20	0.01	0.008	82.99
2025	913.13	0.08	0.077	938.69
2026	278.74	0.02	0.012	282.96
			Total	1,304.64
			<i>Amortized construction emissions</i>	43.5

Source: Appendix B.

As shown in Table 10, the estimated total GHG emissions during construction would be approximately 1,305 MTCO₂e over the construction period. Estimated project-generated construction emissions amortized over 30 years would be approximately 43.5 MTCO₂e per year. As with project-generated construction criteria air pollutant emissions, GHG emissions generated during construction of the project would only occur when construction is active, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

Operation of the project would generate GHG emissions through motor vehicle trips to and from the project site, landscape maintenance equipment operation, energy use, solid waste disposal, and generation of electricity associated with water supply, treatment, and distribution and wastewater treatment. CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 6.2.

The estimated operational project-generated GHG emissions from area sources, energy usage, motor vehicles, off-road and stationary sources, solid waste generation, and water usage and wastewater generation are shown in Table 11.

Table 11. Estimated Annual Operational Greenhouse Gas Emissions

Construction Year	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Metric Tons per Year			
Mobile	911.53	0.03	0.03	922.44
Area	1.79	0.0002	0.0000 2	1.80
Energy	32.59	0.005	0.0006	32.91
Water	2.36	0.08	0.002	5.06
Waste	4.88	0.49	0	17.07
Refrigeration	0	0	0	0.08
Total	953.15	0.61	0.03	979.37
			<i>Amortized construction emissions</i>	43.5
			Total operational + amortized construction GHGs	1,022.87

Source: Appendix B.

Note: These emissions reflect operational year 2027.

As shown in Table 11, estimated annual project-generated GHG emissions would be approximately 979 MT CO₂e per year as a result of project operations only. After summing the amortized project construction emissions, total GHGs generated by the project would be approximately 1,023 MT CO₂e per year. In summary, Impact GHG-1 would be less than significant.

7.1 Cumulative Impacts

7.1.1 Air Quality

The cumulative setting for air quality includes the Air Basin. The Air Basin is designated as a nonattainment area for state standards of ozone, PM₁₀, and PM_{2.5} and federal standards of ozone and PM_{2.5}; an attainment and serious maintenance area for federal PM₁₀ standards; and unclassified or attainment for all other pollutants. Cumulative growth in population and vehicle use could inhibit efforts to improve regional air quality and attain the ambient air quality standards. The BAAQMD CEQA Air Quality Guidelines do not include separate significance thresholds for cumulative construction and operational emissions. However, with respect to regional air pollution, the development of the project would improve the jobs/housing balance and jobs/housing fit by providing preference for those who live or work on the San Mateo Coast, redispersing existing county residences and reducing distances traveled between work and home. Therefore, the project would not affect the 2017 Clean Air Plan population forecasts. As described in threshold discussion, above, the project would also be consistent with the appropriate 2017 Clean Air Plan control measures, which are provided to reduce air quality emissions for the entire Bay Area region. Additionally, the previous threshold discussion, above, addresses cumulative impacts and demonstrates that the project would not exceed the applicable BAAQMD thresholds for construction or operations. The BAAQMD CEQA Air Quality Guidelines note that the nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size by itself to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. Consistency with the 2017 Clean Air Plan control measures would ensure that the project would not cumulatively contribute to air quality impacts in the Basin; therefore, impacts would be less than significant.

7.1.2 Greenhouse Gas Emissions

The analysis of a project's GHG emissions is inherently a cumulative impacts analysis because climate change is a global problem and the emissions from any single project alone would be negligible. Accordingly, the analysis above considers the potential for the project to contribute to the cumulative impact of a global climate change. Table 10 shows the estimated annual project-generated GHG emissions as a result of project construction. Given that the project would generate only construction GHG emissions that would not conflict with applicable reduction plans and policies and given that GHG emission impacts are cumulative in nature, the project's incremental contribution to cumulatively significant GHG emissions would be less than significant.

7.2 Mitigation Measures

As discussed, all construction projects within BAAQMD must comply with the best management practices regarding fugitive dust and equipment exhaust emissions. Mitigation Measure AQ-1 and AQ-2 have been outlined and will be included in the project.

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APPENDIX A

2018 Illingworth and Rodkin, Inc

**Cypress Point Affordable Housing Project Air Quality and Greenhouse Gas
Emissions Assessment**

***CYPRESS POINT AFFORDABLE
HOUSING PROJECT
AIR QUALITY & GREENHOUSE GAS
EMISSIONS ASSESSMENT***

Moss Beach, California

June 29, 2018

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Introduction

The purpose of this report is to address air quality, toxic air contaminant (TAC), and greenhouse gas (GHG) emission impacts associated with the proposed residential project located northeast of the intersection of Carlos street and Sierra Street in Moss Beach. The project proposes to develop 71 affordable housing units, consisting of 18 two-story buildings holding 3 to 4 units each and a one-story community building. Air quality and GHG impacts could occur due to temporary construction emissions and as a result of direct and indirect emissions from new uses. Also, the localized community risk impacts from diesel emissions of project construction equipment and nearby TACs (such as emergency backup generators and roadway traffic) are addressed. This analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).

Setting

The project is located in San Mateo County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards for criteria air pollutants (defined below) have been established at the federal level under the Clean Air Act, and at the state level under the California Clean Air Act. In addition, BAAQMD has established significance thresholds for TACs, discussed below.

Criteria Air Pollutants

The Clean Air Act and California Clean Air Act authorize the Environmental Protection Agency (EPA) and California Air Resources Board (CARB) respectively to establish standards for a set of six pollution constituents that contribute to chronic and acute health impacts. These criteria pollutants include: ground-level ozone, oxides of nitrogen (NO_x), particulate matter (PM), carbon monoxide, sulfur dioxide, and lead. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}), which are described below.

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant in the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

TACs are a broad class of compounds known to cause sickness or death (usually because they cause cancer). TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level. While not a TAC, fine particulate matter (PM_{2.5}) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA).

Diesel exhaust is the predominant TAC in air in urban areas and is estimated to contribute more than eighty-five percent of a 2006 inventory of Bay Area cancer risk from TACs.¹ According to CARB, diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

CARB has adopted and implemented a number of regulations to reduce emissions of DPM from stationary and mobile sources. Several of these regulatory programs affect medium- and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles, including those used at construction sites.² The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Land uses that may contain a high concentration of these sensitive population groups include residential neighborhoods, hospitals, daycare facilities, elder care facilities, and schools.

Sensitive receptors (residences) are located adjacent to the north, east and south of the project site, with additional residences located southwest of the site, as shown in Figure 1. The

¹ BAAQMD, 2014. *Air Quality and Health in Bay Area Communities*. April.

² Available online: <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>. Accessed: June 9, 2015.

maximally exposed individual (MEI) is the receptor exposed to the maximum excess cancer risk and annual PM_{2.5} concentration.

County of San Mateo Zoning Ordinance and Local Coastal Program

There are no air quality policies contained in the County's Local Coastal Program Policies³ or Zoning Ordinance that are applicable to the proposed project.

California Coastal Act

California Coastal Act Section 30253(c) requires that new development in the Coastal Zone shall "be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development." In this case, the air pollution control district is BAAQMD.

Greenhouse Gases

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO₂ being assigned a value of 1 and sulfur hexafluoride being several orders of magnitude stronger. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO₂ equivalents (CO₂e).

An expanding body of scientific research supports the theory that global warming is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. California's climate

³ County of San Mateo, 2013. *Local Coastal Program Policies*.

and several other natural resources and processes within California have and will continue to be adversely affected by the global warming trend, including: increased precipitation; sea level rise; increased coastal flooding; saltwater intrusion; degradation of wetlands; and adverse impacts on plant and animal species. The effects of global climate change that could adversely affect human health include: increases in extreme heat events and heat-related stress; increases in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

Methodology

The emissions of criteria air pollutants resulting from project construction and operations (long-term habitation), and emissions of GHG from project operations are addressed qualitatively in this analysis, using screening criteria provided by BAAQMD based on project type and size. While they are not significance thresholds, BAAQMD has developed these screening criteria to provide lead agencies with a method to develop a conservative indication of whether a project could result in potentially significant air quality impacts. If the screening criteria are met, a lead agency does not need to perform a quantified assessment of criteria air pollutant emissions. The screening criteria used are discussed under Impact 2 in *Impacts and Project Measures* below.

Community risk impacts resulting from construction of the proposed project are evaluated by computing estimated construction DPM and fugitive dust emissions using the California Emissions Estimator Model (CalEEMod 2016.3.2). Those emissions are then input to the EPA ISCST3 dispersion model to determine concentrations at nearby sensitive receptors. Finally, State of California Office of Environmental Health Hazard Assessment (OEHHA) and CARB health risk modeling methodology, as recommended by BAAQMD, are used to predict community risk values at the receptors, which are evaluated against the BAAQMD-recommended significance thresholds contained in Table 1. In addition, though not required by the California Environmental Quality Act (CEQA)⁴, the potential impact of non-project pollutant sources (i.e., roadway and stationary sources) on project residents is addressed using BAAQMD screening tools.

Significance Thresholds

The BAAQMD is the regional agency tasked with managing air quality in the region. At the State level, the CARB (a part of the California Environmental Protection Agency [EPA]) oversees regional air district activities and regulates air quality at the State level. The BAAQMD published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate the air quality impacts of projects.⁵

⁴ In December 2015, the Supreme Court determined that an analysis of the impacts of the environment on a project – known as “CEQA-in-reverse” – is only required under two limited circumstances: (1) when a statute provides an express legislative directive to consider such impacts; and (2) when a proposed project risks exacerbating environmental hazards or conditions that already exist (Cal. Supreme Court Case No. S213478). Though not necessarily a CEQA issue, the effect of existing TAC sources on future project receptors (residences) is analyzed to comply with the Clean Air Plan key goal of reducing population TAC exposure and protecting public health in the Bay Area.

⁵ BAAQMD, 2017. *BAAQMD CEQA Air Quality Guidelines*. May.

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA. BAAQMD’s adoption of significance thresholds, as contained in the 2011 CEQA Air Quality Guidelines, was challenged in court and ultimately the California Supreme Court upheld the thresholds. In May 2017, BAAQMD published a new version of its CEQA Guidelines, which includes revisions that address the California Supreme Court’s decision. The BAAQMD May 2017 CEQA Guidelines are used in this analysis (Table 1). In addition, Table 2 contains the BAAQMD screening sizes for low-rise apartments. The screening criteria are not thresholds of significance, but may be used by a lead agency as a conservative indication of whether a proposed project can be considered small enough that analysis of air quality or GHG emissions are not required.

Table 1. Air Quality Significance Thresholds

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (Exhaust)	82	15
PM _{2.5}	54 (Exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards	Single Sources Within 1,000-foot Zone of Influence	Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)	
Excess Cancer Risk	>10 per one million	>100 per one million	
Hazard Index	>1.0	>10.0	
Incremental annual PM _{2.5}	>0.3 µg/m ³	>0.8 µg/m ³	
Greenhouse Gas Emissions			
GHG Annual Emissions	Compliance with a Qualified GHG Reduction Strategy OR 1,100 metric tons or 4.6 metric tons per capita		
Note: ROG = reactive organic gases, NO _x = nitrogen oxides, PM ₁₀ = coarse particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM _{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less, and GHG = greenhouse gases.			

Table 2. BAAQMD Screening Sizes for Low-Rise Apartments

Land Use	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction Screening Size
Low-Rise Apartment	451 dwelling units	78 dwelling units	240 dwelling units

Impacts and Mitigation Measures

Impact 1: Conflict with or obstruct implementation of the applicable air quality plan? *Less than significant.*

The most recent clean air plan covering the project site is the *2017 Clean Air Plan* adopted by BAAQMD in April 2017.⁶ The proposed project would not conflict with the latest Clean Air planning efforts since 1) the project would have emissions below the BAAQMD thresholds (see Impact 2). The project is too small to exceed any of the significance thresholds and, thus, it is not required to incorporate the project-specific transportation control measures listed in the latest Clean Air Plan. This would be a less-than-significant impact and no mitigation is required.

Impact 2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable State or federal ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? *Less than significant with mitigation incorporated.*

The Bay Area is considered a non-attainment area for ground-level ozone and PM_{2.5} under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM₁₀ under the California Clean Air Act, but not the federal act. The area has attained both State and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM₁₀, the BAAQMD has established thresholds of significance for these air pollutants and their precursors (see Table 1). These thresholds are for ozone precursor pollutants (ROG and NOx), PM₁₀, and PM_{2.5} and apply to both construction period and operational period impacts.

In the 2017 update to the CEQA Air Quality Guidelines,⁷ BAAQMD identifies screening criteria for the sizes of land use projects that could result in significant air pollutant emissions. For construction impacts, the screening project size for low-rise apartments is identified as 240 dwelling units. For operational impacts, the screening size for apartments is identified at 451 dwelling units. Since the project proposes to develop up to 71 dwelling units, project emissions would be below the BAAQMD significance thresholds. No stationary sources of air pollution (e.g., back-up generators) have been identified with this project. Therefore, project construction and operations emissions would be less than significant.

⁶ BAAQMD, 2017. *Spare the Air Cool the Climate A Blueprint for Clean Air and Climate Protection in the Bay Area: Final 2017 Clean Air Plan*. April 19.

⁷ BAAQMD, 2017. *CEQA Air Quality Guidelines*. May.

However, construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD *CEQA Air Quality Guidelines* consider these impacts to be less than significant if best management practices are implemented to reduce these emissions. With implementation of *Mitigation Measure AQ-1, which would implement BAAQMD-recommended best management practices, this impact is considered less than significant.* To reduce this impact to a less-than-significant level, implement Mitigation Measure AQ-1

Mitigation Measure AQ-1: Include basic measures to control dust and exhaust during construction.

During any construction period ground disturbance, the applicant shall ensure that the project contractor implements measures to control dust and exhaust. MidPen will include terms in all construction contracts related to the Cypress Point project that require contractors to implement the following best management practices:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Effectiveness of Mitigation

Implementation of Mitigation Measure AQ-1 would ensure that the recommended BAAQMD best management practices are instated, which the BAAQMD considers sufficient to reduce this impact to a level of less than significant.

Impact 3: Violate any air quality standard or contribute substantially to an existing or projected air quality violation? *Less than significant with mitigation incorporated.*

Particulate Matter and Ozone. As discussed under Impact 2, the project would have emissions less than the BAAQMD screening size for evaluating impacts related to ozone and particulate matter. As discussed above, construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD *CEQA Air Quality Guidelines* consider these impacts to be less than significant if best management practices are implemented to reduce these emissions. This impact is considered significant because appropriate control measures are not part of the project. With implementation of *Mitigation Measure AQ-1, described above, which would implement BAAQMD-recommended best management practices, this impact is considered less than significant.*

Carbon Monoxide. Carbon monoxide emissions from traffic generated by the project would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high-localized concentrations of carbon monoxide. Air pollutant monitoring data indicate that carbon monoxide levels have been at healthy levels (i.e., below State and federal standards) in the Bay Area since the early 1990s. As a result, the region has been designated as attainment for the standard. The highest measured level over any 8-hour averaging period during the last 3 years in the Bay Area is less than 3.0 parts per million (ppm), compared to the ambient air quality standard of 9.0 ppm. Intersections affected by the project would have traffic volumes less than 3,000 vehicles per hour, which is much less than the BAAQMD screening criteria and, thus, would not cause a violation of an ambient air quality standard or have a considerable contribution to cumulative violations of these standards.⁸

⁸ For a land-use project type, the BAAQMD CEQA Air Quality Guidelines state that a proposed project would result in a less than significant impact to localized carbon monoxide concentrations if the project would not increase traffic at affected intersections with more than 44,000 vehicles per hour.

Impact 4: Expose sensitive receptors to substantial pollutant concentrations as defined by BAAQMD? *Less than significant with mitigation incorporated.*

While criteria pollutants (such as particulate matter (PM₁₀ and PM_{2.5}) are a concern at the regional level, community risk impacts from TACs and annual PM_{2.5} exposure to nearby sensitive receptors are also a localized concern. While the discussion under Impacts 1-3 above addressed PM at the regional level, this impact addresses PM at the localized level. Impacts related to increased community risk can occur either by introducing new sensitive receptors, such as residences, in proximity to existing sources of TACs or by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity.

The BAAQMD CEQA Air Quality Guidelines recommends using a 1,000-foot screening radius around a project site for purposes of identifying community health risk from siting a new sensitive receptor or a new source of TACs.

Operation of the project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy air pollutant levels, because no stationary sources of TACs, such as generators, are proposed as part of the project. However, the proposed project would introduce new sensitive receptors to the area in the form of future residences, which could be exposed to existing sources of TACs. Project-related construction activity would temporarily generate dust and equipment exhaust that could affect nearby sensitive receptors that include residences.

This analysis therefore evaluates the following community risk impacts:

- Exposure of project residents to existing mobile sources of TACs (Impact 4a);
- Exposure of project residents to existing stationary sources of TACs (Impact 4b);
- Exposure of nearby existing residences to project construction-related TACs (Impact 4c).

BAAQMD thresholds that address both the impact of single and cumulative TAC sources upon projects that include new sensitive receptors (see Table 1) are used in this analysis. *Attachment 1* includes the detailed community risk modeling methodology.

The exposure of residents to substantial air pollutant sources is analyzed below, beginning with an analysis of impacts on project residents from existing mobile and stationary sources, followed by an analysis of the impacts of project construction on existing sensitive receptors, and finally an analysis of the cumulative exposure of the maximally exposed individual.

Impact 4a: Impacts on Project Residents from Existing Sources

Mobile Sources

BAAQMD provides a Highway Screening Analysis tool that uses Google Earth to identify estimated risk and hazard impacts from highways throughout the Bay Area. Cancer risk, chronic and acute hazard index (HI), and annual PM_{2.5} values at various distances are estimated for different highway segments (as described in detail in *Attachment 1*). The tool uses the average annual daily traffic (AADT) count, fleet mix and other modeling parameters specific to that segment of the highway. Impacts from traffic on SR-1 (Link 41, at 6 feet of elevation), which is

150 feet or greater north of the project site, were identified using this tool. The estimated cancer risk was adjusted using a factor of 1.3744 to account for new OEHHA guidance (see *Attachment I*). This factor was provided by BAAQMD for use with their CEQA screening tools.⁹ The cancer risk at the project site was found to be 5.9 in a million, which is below the significance threshold of 10 in one million. The PM_{2.5} concentration was found to be 0.06 µg/m³, which is below the significance threshold of 0.3 µg/m³, and the HI is 0.01, which is below the significance threshold of 1.0. This would be a less-than-significant impact and no mitigation is required.

Stationary Sources

The locations of any permitted stationary sources of air pollution near the project site were identified using BAAQMD’s *Stationary Source Risk & Hazard Analysis Tool*, a mapping tool that uses Google Earth. This tool identified the location of one stationary source and its estimated risk and hazard screening values. The 2012 estimated risk values were adjusted using the factor of 1.3744 described above under *Mobile Sources*. The risk values were then adjusted with the appropriate distance multiplier values provided by BAAQMD. The values reported below reflect the above adjustments:

- Plant 14546, which is an emergency back-up generator operated by Sewer Authority Mid-Coastside, located at 16th Street and Cabrillo Highway, is approximately 450 feet west of the project site. At BAAQMD’s direction, risk and PM2.5 concentrations from the facility were adjusted based on BAAQMD’s Distance Adjustment Multiplier Tool for Diesel Internal Combustion Engines. According to the BAAQMD screening data (and adjusted for the 450-foot distance and 2015 OEHHA methodology), this facility would result in an adjusted lifetime cancer risk of 2.9 in one million, PM2.5 concentration of <0.01 µg/m³, and <0.01 HI, which would all be below BAAQMD thresholds of significance (Table 1). This would be a less-than-significant impact and no mitigation is required.

Combined Operational TAC Sources

Community risk impacts on project residents from combined sources are reported in Table 3. As shown in Table 3, risk from combined operational TAC sources at the project site would be below the BAAQMD cumulative thresholds of 100 in one million and 0.8 µg/m³, respectively. Hazard index (HI) would also be cumulatively less than significant. This would be a less-than-significant impact and no mitigation is required.

Table 3. Impacts from Combined TAC Sources at Project Site

Source	Maximum Cancer Risk (per million)	Hazard Index	PM _{2.5} concentration (µg/m ³)
SR-1/Cabrillo Highway	5.9	0.01	0.06
Plant 14546, Sewer Authority Mid-Coastside 16 th Street and Cabrillo Highway	2.9	<0.01	<0.01
Combined Total	8.8	<0.01	<0.07
BAAQMD Threshold – Combined Sources	100	10.0	0.8

⁹ Correspondence with Alison Kirk, BAAQMD, November 23, 2015.

Impact 4b: Impacts on Existing Sensitive Receptors from Project Construction Activity

Construction activities, particularly during site preparation and grading would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD *CEQA Air Quality Guidelines* consider these impacts to be less than significant if best management practices are employed to reduce these emissions. *Mitigation Measure AQ-1 would implement BAAQMD-required best management practices.*

Construction equipment and associated heavy-duty truck traffic also generates diesel exhaust, which is a known TAC¹⁰. Construction exhaust emissions may pose community risks for sensitive receptors such as nearby residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A community risk assessment of the project construction activities was conducted to evaluate potential health effects on sensitive receptors at these nearby residences from construction emissions of DPM and PM_{2.5}. The closest sensitive receptors to the project site are located adjacent to the north, east and south sides of the project site (see Figure 1). Emissions and dispersion modeling was conducted to predict the off-site DPM concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

Methodology

Construction period emissions were modeled using the California Emissions Estimator Model, Version 2016.3.2 (CalEEMod). A build-out construction schedule including equipment usage assumptions was developed based on CalEEMod defaults for a project of this type and size. The proposed project land uses were input into CalEEMod, which included 71 dwelling units entered as “Condo/Townhouse,” and 161 spaces entered as “Parking Lot”¹¹ on 5.8 acres of the 10.875-acre site. It was assumed that cut and fill at the site would be balanced, so that there would not be any substantial amount of soil hauling either on or off-site. Construction emissions were then input to the U.S. EPA ISCST3 dispersion model with project and receptor coordinates and meteorological data. DPM and PM_{2.5} concentrations at modeled receptor locations were then used to estimate community risk impacts (cancer risk, annual PM_{2.5} concentration and hazard index) from project construction using the detailed methodology contained in *Attachment 1*.

The CalEEMod model estimated total annual PM₁₀ exhaust emissions (assumed to be DPM) from off-road construction equipment and from on-road vehicles (haul truck travel during demolition, worker travel, and vendor deliveries during construction). An average trip length of 0.5 mile was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at

¹⁰ DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

¹¹ The proposed project was subsequently revised to reduce the number of parking places, so this analysis represents an overstatement of the emissions of the proposed project.

the construction site. Total emissions of PM₁₀ exhaust from all stages of project construction were estimated to be 0.217 tons (434 pounds). Total emissions of fugitive PM_{2.5} dust emissions from all stages of project construction were estimated to be 210 pounds.

Next, annual DPM and PM_{2.5} concentrations at neighboring residences from construction activities during the expected 2018 – 2019 construction period were calculated using the U.S. EPA ISCST3 dispersion model. The ISCST3 modeling used two separate area pollution sources¹² to represent different areas of on-site construction activities. Emission rates for two area sources were used to represent the on-site construction emissions, one for exhaust emissions and one for fugitive dust emissions. To represent the construction equipment exhaust emissions, an emission release height of 6 meters (19.7 feet) was used for the area source. The elevated source height reflects the height of the equipment exhaust pipes plus an additional distance for the height that the hot exhaust plume will rise above the exhaust pipes. For modeling fugitive PM_{2.5} emissions, a near-ground level release height of 2 meters (6.6 feet) was used for the area source. Emissions from the construction equipment and on-road vehicle travel were distributed amongst the modeled area sources. Construction emissions were modeled as occurring daily between 7 a.m. to 4 p.m., when the majority of construction activity would occur. The modeling used a 5-year meteorological data set (2001-2005) from a meteorological monitoring station in Fort Funston, San Francisco to determine wind patterns. These data were prepared for use with the ISCST3 model by BAAQMD and are the most recent and available data from the Air District.

DPM and PM_{2.5} concentrations were then calculated at nearby sensitive receptor locations. Receptor heights of 1.5 meters (4.9 feet) and 4.5 meters (14.8 feet) were used to represent the breathing heights for residences.

Cancer Risk

Figure 1 shows the locations where the maximum-modeled DPM and PM_{2.5} concentrations occurred. The maximum concentrations occurred at a residence adjacent to the northern boundary of the project site at the 1.5-meter receptor height. Using the maximum annual modeled DPM concentrations, the maximum increased cancer risk at the location of the maximally exposed individual (MEI) was calculated using BAAQMD-recommended methods. The cancer risk calculations are based on applying the BAAQMD recommended age sensitivity factors to the TAC concentrations. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. BAAQMD-recommended exposure parameters were used for the cancer risk calculations, as described in *Attachment 1*. To be conservative, infant and adult exposures were assumed to occur at all residences through the entire construction period.

Results of this assessment indicate that the maximum increased residential cancer risks would be 45.9 in one million for an infant exposure and 0.8 in one million for an adult exposure. The maximum residential excess cancer risk would be above the significance threshold of 10.0 in one

¹² Area sources are used to represent conditions where emissions are spread out over a wide geographical area, as opposed to point sources (such as boilers) which are emitted from a single exhaust stack, and mobile sources (such as vehicles) which emit pollutants as they travel along roadways.

million, so this impact would be significant. *Implementation of Mitigation Measures AQ-1 (described above) and AQ-2 (described below) would reduce this impact to less than significant.*

Annual PM_{2.5} Concentration

The maximum-modeled annual PM_{2.5} concentration, which is based on combined exhaust and fugitive dust emissions, was 0.41 µg/m³. This maximum annual PM_{2.5} concentration would be above the BAAQMD significance threshold of greater than 0.3 µg/m³. The location of the receptor with the maximum PM_{2.5} concentration is at the same as where the maximum TAC impact would occur, and is shown in Figure 1. *Implementation of Mitigation Measures AQ-1 (described above) and Mitigation Measure AQ-2 (described below) would reduce this impact to less than significant.*

Non-Cancer Hazards

The maximum modeled annual residential DPM concentration (i.e., from construction exhaust) was 0.16 µg/m³. The maximum computed HI based on this DPM concentration was 0.03, which is lower than the BAAQMD significance criterion of a HI greater than 1.0. This would be a less-than-significant impact and no mitigation is required.

Cumulative Impact on Construction MEI

The cumulative impacts of TAC emissions from three sources (construction of the project, the nearby stationary source, and traffic on SR-1) on the construction MEI are summarized in Table 4. As shown in Table 4, the sum of impacts from combined sources at the construction MEI would be below the BAAQMD threshold, and therefore would be less than significant.

Table 4. Impacts from Combined Sources at Construction MEI

Source	Maximum Cancer Risk (per million)	PM _{2.5} concentration (µg/m ³)	Hazard Index
Project Construction	45.9	0.41	0.03
SR-1/Cabrillo Highway	<5.9	<0.01	<0.06
Plant 14546, Sewer Authority Mid-Coastside 16 th Street and Cabrillo Highway	<2.9	<0.01	<0.01
Combined Total	<54.7	<0.43	<0.10
BAAQMD Threshold – Combined Sources	100	0.8	10.0

Overall Community Risk Conclusion

The project would have a *significant* impact with respect to community risk caused by project construction activities, since estimated cancer risk and PM_{2.5} concentrations are above the single-source thresholds of 10.0 per million for cancer risk and a concentration of greater than 0.3 µg/m³ for annual PM_{2.5}. *Implementation of Mitigation Measures AQ-1 (described above) and Mitigation Measure AQ-2 (described below) would reduce this impact to less than significant.* Attachment 2 includes the emission calculations and source information used in the modeling and the cancer risk calculations.

Mitigation Measure AQ-2: Use Construction equipment that has low diesel particulate matter exhaust emissions.

Prior to initiating any construction activities, MidPen or their contractors shall develop a plan demonstrating that the off-road equipment used to on-site to construct the project would achieve a fleet-wide average of at least 78 percent reduction in DPM emissions compared to the emissions calculated for the project without mitigation (434 pounds of DPM emissions). One feasible plan to achieve this reduction would include the following:

All mobile diesel-powered off-road equipment larger than 25 hp and operating on the site for more than two days shall meet, at a minimum, U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent. Note that the construction contractor could use other measures to minimize construction period DPM emission to reduce the estimated cancer risk below the thresholds. The use of equipment that meets U.S. EPA Tier 2 standards and includes CARB-certified Level 3 Diesel Particulate Filters¹³ or alternatively-fueled equipment (i.e., non-diesel) would meet this requirement. Other measures may be the use of added exhaust devices, or a combination of measures, provided that these measures are approved by the County and demonstrated to reduce community risk impacts to less than significant.

Effectiveness of Mitigation

The effectiveness of proposed mitigation measures to reduce impacts related to community risk was evaluated by comparing DPM and PM_{2.5} emissions between the unmitigated and mitigated CalEEMod runs and estimating mitigated risk values based on the unmitigated ISCST3 run (see *Attachment 2* for the CalEEMod runs and risk calculations). With mitigation, the computed maximum increased lifetime residential cancer risk from construction, assuming infant exposure, would be 7.3 in one million or less, and the maximum annual PM_{2.5} concentration would be than 0.1 µg/m³. The cancer risk would be below the BAAQMD threshold of 10 in one million for cancer risk and the annual PM_{2.5} concentration would be below the BAAQMD threshold of 0.3 µg/m³. *After implementation of these recommended measures, the project would have a less-than-significant impact with respect to community risk caused by construction activities.*

¹³ See <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>

Figure 1. Project Construction Site, Locations of Off-Site Sensitive Receptors and Maximum TAC Impact



Impact 5: Create objectionable odors affecting a substantial number of people? *Less than significant.*

Construction of the project would generate localized emissions of diesel exhaust from construction equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors. However, they would be localized and are not likely to adversely affect people off site by resulting in confirmed odor complaints. Operation of the project would not include any sources of significant odors, such as sewage treatment, landfills, petroleum refining, autobody and coating operations, or livestock operations, that would be likely to cause complaints from surrounding uses. This would be a *less-than-significant impact*.

Impact 6: Generate pollutants (hydrocarbon, thermal odor, dust or smoke particulates, radiation, etc.) that will violate existing standards of air quality on-site or in the surrounding area.? *Less than significant with mitigation incorporated.*

As described under Impacts 2 and 3, the project would be a source of air pollutant emissions that include hydrocarbons (i.e., ROG). This impact is considered less than significant if appropriate best management control measures are incorporated during construction. As described under Impact 5, the project would not be a long-term source of odors. There would be temporary, localized, odors generated during construction. The project would not be a source of heat, radiation or smoke.

Impact 7: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? *Less than significant.*

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic generated by the project, energy and water usage by project residents, and the disposal of solid waste generated by project residents. Both short-term and long-term GHG emissions from the project were estimated.

Construction Emissions

GHG emissions were computed using the CalEEMod model and project-specific information. Construction of the project is estimated to emit 676 MT of CO₂e over the total construction duration. Neither San Mateo County nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction, where feasible and applicable. As part of the project's environmental commitments, MidPen will make the best efforts to meet the following as part of construction of the Cypress Point project:

- Use at least 10 percent local building materials;
- Recycle or reuse at least 50 percent of construction waste or demolition materials.

Operational Emissions

For operational GHG emissions, the BAAQMD screening level is 78 dwelling units for low-rise apartments. Since, the project proposes 71 dwelling units, it is concluded that the operational GHG emissions would not exceed the BAAQMD significance thresholds. Therefore, this impact would be less than significant and no mitigation is required.

Impact 8: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? *Less-than-significant.*

Plan Bay Area 2040

As required by Senate Bill 375, all metropolitan regions in California must complete a Sustainable Communities Strategy (SCS) as part of a Regional Transportation Plan. In the Bay Area, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are jointly responsible for developing and adopting a SCS that integrates transportation, land use and housing to meet greenhouse gas reduction targets set by the California Air Resources Board (CARB). Plan Bay Area 2040 is the latest update of the integrated long-range transportation and land use plan prepared by MTC and ABAG in compliance with SB 375. (MTC and ABAG. 2018)

The region adopted its previous plan — Plan Bay Area — in July 2013. As the Bay Area’s first regional transportation plan to include a Sustainable Communities Strategy, the original Plan Bay Area charted a course for reducing per-capita greenhouse gas emissions through the promotion of more compact, mixed-use residential and commercial neighborhoods near transit. Plan Bay Area supported Priority Development Areas (PDAs) selected and approved by city and county governments. Development of PDAs is supported with planning grants, technical assistance, and prioritization for regional and state transportation and affordable housing funds. (MTC and ABAG. 2018)

Plan Bay Area 2040 is a limited and focused update that builds upon the growth pattern and strategies developed in the original Plan Bay Area, but with updated planning assumptions that incorporate key economic, demographic and financial trends from the last four years. It also provides both a roadmap for accommodating projected household and employment growth in the nine-county Bay Area by 2040, and a transportation investment strategy for the region. Plan Bay Area 2040 details how the Bay Area can make progress toward the region’s long-range transportation and land use goals. (MTC and ABAG. 2018)

Compatibility of Proposed Project with Plan Bay Area 2040

While the Plan Bay Area 2040 addresses transportation and housing issues at a very large scale (the nine-county Bay Area), and the focus of the plan within San Mateo County is on the more densely developed San Francisco Bay side of the County, there are some aspects of the Plan Bay Area against which the proposed project can be evaluated. Specifically, Plan Bay Area 2040 includes several goals, objectives, and actions pertinent to the proposed project.

Plan Bay Area 2040, under Setting Goals and Targets to Address Challenges, states one of its goals as: “Plan Bay Area 2040 must include sufficient housing for all of the region’s projected population growth, regardless of income.” (MTC and ABAG. 2018)¹⁴

The Plan Bay Area 2040, under Action Plan, includes the following objective regarding housing: “Lower the share of income spent on housing and transportation costs, lessen displacement risk, and increase the availability of housing affordable to low- and moderate-income households.” (MTC and ABAG. 2018)

The Plan Bay Area 2040 Action Plan, under Housing Production, Preservation and Protection section states: “Regional agencies will partner with state and local government, business leaders, and nongovernmental organizations (NGOs) to identify and implement game-changing housing solutions that will facilitate improved housing performance by: producing more housing, particularly housing affordable to very low-, low- and moderate-income households; preserving existing housing that is affordable to very low-, low- and moderate-income households; and lessening displacement risks faced by existing residents.”

The proposed project is consistent with and would contribute to fulfilling the Plan Bay Area 2040 goal of providing housing for the Bay Area’s population, regardless of income by providing affordable housing units within San Mateo County. Similarly, it is consistent with the Plan Bay Area 2040 objective of increasing the availability of housing for low- and moderate-income households, as that is the goal of the proposed project. Finally, it would be consistent with the Plan Bay Area 2040 action related to teaming with nongovernmental organizations to provide affordable housing, as MidPen is working with San Mateo County to provide affordable housing in the MidCoast region.

Thus, the proposed project is consistent with the Plan Bay Area 2040, and would contribute, although to a modest degree, to the fulfillment of the plan’s goals, objectives, and actions. Therefore, this impact is less than significant, and no mitigation is required.

Impact 9: Other impacts related to Climate Change. *Less-than-significant.*

The proposed project would not result in the loss of forestland, or convert forestland to non-forest uses (see discussion under “Agriculture and Forestry Resources” in the Preliminary Environmental Evaluation Report). The project site is located more than 500 feet from a cliff and does not involve the development of leach fields, so it would not expose new structures to accelerated coastal cliff or bluff erosion due to rising sea levels. The project site sits at an elevation of from 77 to 189 feet above mean sea level, so it is not threatened by sea level rise. Finally, the project is not within the 100-year floodplain, and would not result in the construction of any structures within the floodplain (see discussion under “Hydrology and Water Quality” in the Preliminary Environmental Evaluation Report). Therefore, this impact is less than significant, and no mitigation is required.

¹⁴ Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2018. Plan Bay Area 2040 webpage. Accessed at: <http://2040.planbayarea.org/>; by Craig Stevens on May 25, 2018. Includes “What is Plan Bay Area 2040” and “Action Plan” web pages.

Attachment 1: Health Risk Calculation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.¹ These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.² This HRA used the recent 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.³ Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

Potential increased cancer risk from inhalation of TACs are calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency of exposure, and the exposure duration. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day). As recommended by the BAAQMD, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th percentile breathing rates for child and adult exposures. Additionally, CARB and the BAAQMD recommend the use of a residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways).

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home

¹ OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

² CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.

³ BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. January 2016.

(FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. Use of the FAH factors is allowed by the BAAQMD if there are no schools in the project vicinity that would have a cancer risk of one in a million or greater assuming 100 percent exposure (FAH = 1.0).

Functionally, cancer risk is calculated using the following parameters and formulas:

$$\text{Cancer Risk (per million)} = CPF \times \text{Inhalation Dose} \times ASF \times ED/AT \times FAH \times 10^6$$

Where:

- CPF = Cancer potency factor (mg/kg-day)⁻¹
- ASF = Age sensitivity factor for specified age group
- ED = Exposure duration (years)
- AT = Averaging time for lifetime cancer risk (years)
- FAH = Fraction of time spent at home (unitless)

$$\text{Inhalation Dose} = C_{air} \times DBR \times A \times (EF/365) \times 10^{-6}$$

Where:

- C_{air} = concentration in air (µg/m³)
- DBR = daily breathing rate (L/kg body weight-day)
- A = Inhalation absorption factor
- EF = Exposure frequency (days/year)
- 10⁻⁶ = Conversion factor

The health risk parameters used in this evaluation are summarized as follows:

Parameter	Exposure Type →	Infant		Child		Adult
	Age Range →	3 rd Trimester	0<2	2 < 9	2 < 16	16 - 30
DPM Cancer Potency Factor (mg/kg-day) ⁻¹		1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day)*		361	1,090	631	572	261
Inhalation Absorption Factor		1	1	1	1	1
Averaging Time (years)		70	70	70	70	70
Exposure Duration (years)		0.25	2	14	14	14
Exposure Frequency (days/year)		350	350	350	350	350
Age Sensitivity Factor		10	10	3	3	1
Fraction of Time at Home		0.85-1.0	0.85-1.0	0.72-1.0	0.72-1.0	0.73

* 95th percentile breathing rates for 3rd trimester and infants and 80th percentile for children and adults

Non-Cancer Hazards

Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Annual PM_{2.5} Concentrations

While not a TAC, fine particulate matter (PM_{2.5}) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for PM_{2.5} (project level and cumulative) are in terms of an increase in the annual average concentration. When considering PM_{2.5} impacts, the contribution from all sources of PM_{2.5} emissions should be included. For projects with potential impacts from nearby local roadways, the PM_{2.5} impacts should include those from vehicle exhaust emissions, PM_{2.5} generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

Attachment 2: CalEEMod Modeling Output and Risk Calculations

Cypress Point Affordable Housing, Moss Beach - San Mateo County, Annual

**Cypress Point Affordable Housing, Moss Beach
San Mateo County, Annual**

Construction TAC Emissions

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	142.00	Space	0.00	65,971.00	0
Condo/Townhouse	71.00	Dwelling Unit	5.80	76,401.00	203

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - From worksheet provided 6/13/2018. Assigned acreage to residential
- Construction Phase - default
- Trips and VMT - 0.5mi trip lengths to calculate risk from on- and near-site vehicle travel
- Grading - assume balanced site
- Construction Off-road Equipment Mitigation - Tier 4 engines. BAAQMD BMPs
- Off-road Equipment -
- Demolition -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblGrading	MaterialImported	0.00	7,000.00
tblLandUse	LandUseSquareFeet	56,800.00	65,971.00
tblLandUse	LandUseSquareFeet	71,000.00	76,401.00
tblLandUse	LotAcreage	1.28	0.00
tblLandUse	LotAcreage	4.44	5.80
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00
tblTripsAndVMT	WorkerTripLength	10.80	1.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.2326	2.2375	1.4686	2.4000e-003	0.1607	0.1246	0.2853	0.0846	0.1164	0.2010	0.0000	215.6143	215.6143	0.0548	0.0000	216.9854
2019	0.7276	1.6003	1.3264	2.1100e-003	5.0100e-003	0.0924	0.0974	1.3700e-003	0.0867	0.0881	0.0000	185.7431	185.7431	0.0444	0.0000	186.8541
Maximum	0.7276	2.2375	1.4686	2.4000e-003	0.1607	0.1246	0.2853	0.0846	0.1164	0.2010	0.0000	215.6143	215.6143	0.0548	0.0000	216.9854

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1120	2.0621	1.5510	2.4000e-003	0.0396	0.0179	0.0575	0.0200	0.0178	0.0378	0.0000	215.6141	215.6141	0.0548	0.0000	216.9851
2019	0.6583	1.8032	1.4180	2.1100e-003	5.0100e-003	0.0166	0.0216	1.3700e-003	0.0166	0.0180	0.0000	185.7429	185.7429	0.0444	0.0000	186.8539
Maximum	0.6583	2.0621	1.5510	2.4000e-003	0.0396	0.0179	0.0575	0.0200	0.0178	0.0378	0.0000	215.6141	215.6141	0.0548	0.0000	216.9851

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	19.78	-0.72	-6.22	0.00	73.07	84.11	79.32	75.17	83.04	80.70	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2018	8-31-2018	1.2838	1.0356
2	9-1-2018	11-30-2018	0.8939	0.8579
3	12-1-2018	2-28-2019	0.8270	0.8444
4	3-1-2019	5-31-2019	0.8153	0.8616
5	6-1-2019	8-31-2019	0.9794	1.0365
		Highest	1.2838	1.0365

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2018	6/28/2018	5	20	
2	Site Preparation	Site Preparation	6/29/2018	7/12/2018	5	10	
3	Grading	Grading	7/13/2018	8/9/2018	5	20	
4	Building Construction	Building Construction	8/10/2018	6/27/2019	5	230	
5	Paving	Paving	6/28/2019	7/25/2019	5	20	
6	Architectural Coating	Architectural Coating	7/26/2019	8/22/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 154,712; Residential Outdoor: 51,571; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29

Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	875.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	79.00	18.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660
Total	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	8.0000e-005	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1253	0.1253	1.0000e-005	0.0000	0.1254
Total	1.6000e-004	8.0000e-005	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1253	0.1253	1.0000e-005	0.0000	0.1254

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.3163	0.2454	3.9000e-004		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660
Total	0.0154	0.3163	0.2454	3.9000e-004		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	8.0000e-005	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1253	0.1253	1.0000e-005	0.0000	0.1254
Total	1.6000e-004	8.0000e-005	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1253	0.1253	1.0000e-005	0.0000	0.1254

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total	0.0228	0.2410	0.1124	1.9000e-004	0.0903	0.0129	0.1032	0.0497	0.0119	0.0615	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	5.0000e-005	6.1000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0752	0.0752	0.0000	0.0000	0.0753
Total	1.0000e-004	5.0000e-005	6.1000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0752	0.0752	0.0000	0.0000	0.0753

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0500e-003	0.1686	0.1148	1.9000e-004		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total	6.0500e-003	0.1686	0.1148	1.9000e-004	0.0203	7.1000e-004	0.0210	0.0112	7.1000e-004	0.0119	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	5.0000e-005	6.1000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0752	0.0752	0.0000	0.0000	0.0753
Total	1.0000e-004	5.0000e-005	6.1000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0752	0.0752	0.0000	0.0000	0.0753

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0659	0.0000	0.0659	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total	0.0277	0.3067	0.1658	3.0000e-004	0.0659	0.0155	0.0814	0.0337	0.0143	0.0480	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-003	0.0467	0.0146	5.0000e-005	3.7000e-004	8.0000e-005	4.6000e-004	1.0000e-004	8.0000e-005	1.8000e-004	0.0000	4.7028	4.7028	6.5000e-004	0.0000	4.7191
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	8.0000e-005	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1253	0.1253	1.0000e-005	0.0000	0.1254
Total	1.3600e-003	0.0468	0.0156	5.0000e-005	4.8000e-004	8.0000e-005	5.7000e-004	1.3000e-004	8.0000e-005	2.1000e-004	0.0000	4.8280	4.8280	6.6000e-004	0.0000	4.8446

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0148	0.0000	0.0148	7.5900e-003	0.0000	7.5900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.2628	0.1899	3.0000e-004		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total	0.0101	0.2628	0.1899	3.0000e-004	0.0148	1.1600e-003	0.0160	7.5900e-003	1.1600e-003	8.7500e-003	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-003	0.0467	0.0146	5.0000e-005	3.7000e-004	8.0000e-005	4.6000e-004	1.0000e-004	8.0000e-005	1.8000e-004	0.0000	4.7028	4.7028	6.5000e-004	0.0000	4.7191
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	8.0000e-005	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1253	0.1253	1.0000e-005	0.0000	0.1254
Total	1.3600e-003	0.0468	0.0156	5.0000e-005	4.8000e-004	8.0000e-005	5.7000e-004	1.3000e-004	8.0000e-005	2.1000e-004	0.0000	4.8280	4.8280	6.6000e-004	0.0000	4.8446

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1367	1.1929	0.8966	1.3700e-003		0.0765	0.0765		0.0719	0.0719	0.0000	121.2613	121.2613	0.0297	0.0000	122.0040
Total	0.1367	1.1929	0.8966	1.3700e-003		0.0765	0.0765		0.0719	0.0719	0.0000	121.2613	121.2613	0.0297	0.0000	122.0040

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1700e-003	0.0646	0.0261	6.0000e-005	8.4000e-004	1.9000e-004	1.0300e-003	2.5000e-004	1.8000e-004	4.3000e-004	0.0000	6.3488	6.3488	7.9000e-004	0.0000	6.3685
Worker	4.3900e-003	2.1500e-003	0.0275	4.0000e-005	2.9700e-003	4.0000e-005	3.0100e-003	8.0000e-004	4.0000e-005	8.3000e-004	0.0000	3.3648	3.3648	1.5000e-004	0.0000	3.3686
Total	6.5600e-003	0.0667	0.0536	1.0000e-004	3.8100e-003	2.3000e-004	4.0400e-003	1.0500e-003	2.2000e-004	1.2600e-003	0.0000	9.7136	9.7136	9.4000e-004	0.0000	9.7371

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0723	1.2008	0.9300	1.3700e-003		0.0119	0.0119		0.0119	0.0119	0.0000	121.2612	121.2612	0.0297	0.0000	122.0039
Total	0.0723	1.2008	0.9300	1.3700e-003		0.0119	0.0119		0.0119	0.0119	0.0000	121.2612	121.2612	0.0297	0.0000	122.0039

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1700e-003	0.0646	0.0261	6.0000e-005	8.4000e-004	1.9000e-004	1.0300e-003	2.5000e-004	1.8000e-004	4.3000e-004	0.0000	6.3488	6.3488	7.9000e-004	0.0000	6.3685
Worker	4.3900e-003	2.1500e-003	0.0275	4.0000e-005	2.9700e-003	4.0000e-005	3.0100e-003	8.0000e-004	4.0000e-005	8.3000e-004	0.0000	3.3648	3.3648	1.5000e-004	0.0000	3.3686
Total	6.5600e-003	0.0667	0.0536	1.0000e-004	3.8100e-003	2.3000e-004	4.0400e-003	1.0500e-003	2.2000e-004	1.2600e-003	0.0000	9.7136	9.7136	9.4000e-004	0.0000	9.7371

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1511	1.3490	1.0985	1.7200e-003		0.0826	0.0826		0.0776	0.0776	0.0000	150.4667	150.4667	0.0367	0.0000	151.3831
Total	0.1511	1.3490	1.0985	1.7200e-003		0.0826	0.0826		0.0776	0.0776	0.0000	150.4667	150.4667	0.0367	0.0000	151.3831

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4300e-003	0.0780	0.0305	8.0000e-005	1.0500e-003	2.1000e-004	1.2600e-003	3.1000e-004	2.0000e-004	5.1000e-004	0.0000	7.9031	7.9031	9.2000e-004	0.0000	7.9260
Worker	4.9200e-003	2.3400e-003	0.0305	5.0000e-005	3.7300e-003	5.0000e-005	3.7800e-003	1.0000e-003	5.0000e-005	1.0500e-003	0.0000	4.0939	4.0939	1.6000e-004	0.0000	4.0980
Total	7.3500e-003	0.0803	0.0610	1.3000e-004	4.7800e-003	2.6000e-004	5.0400e-003	1.3100e-003	2.5000e-004	1.5600e-003	0.0000	11.9970	11.9970	1.0800e-003	0.0000	12.0240

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0871	1.5033	1.1638	1.7200e-003		0.0141	0.0141		0.0141	0.0141	0.0000	150.4665	150.4665	0.0367	0.0000	151.3829
Total	0.0871	1.5033	1.1638	1.7200e-003		0.0141	0.0141		0.0141	0.0141	0.0000	150.4665	150.4665	0.0367	0.0000	151.3829

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4300e-003	0.0780	0.0305	8.0000e-005	1.0500e-003	2.1000e-004	1.2600e-003	3.1000e-004	2.0000e-004	5.1000e-004	0.0000	7.9031	7.9031	9.2000e-004	0.0000	7.9260
Worker	4.9200e-003	2.3400e-003	0.0305	5.0000e-005	3.7300e-003	5.0000e-005	3.7800e-003	1.0000e-003	5.0000e-005	1.0500e-003	0.0000	4.0939	4.0939	1.6000e-004	0.0000	4.0980
Total	7.3500e-003	0.0803	0.0610	1.3000e-004	4.7800e-003	2.6000e-004	5.0400e-003	1.3100e-003	2.5000e-004	1.5600e-003	0.0000	11.9970	11.9970	1.0800e-003	0.0000	12.0240

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	7.0000e-005	9.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1215	0.1215	0.0000	0.0000	0.1216
Total	1.5000e-004	7.0000e-005	9.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1215	0.1215	0.0000	0.0000	0.1216

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.3100e-003	0.2012	0.1730	2.3000e-004		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.3100e-003	0.2012	0.1730	2.3000e-004		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	7.0000e-005	9.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1215	0.1215	0.0000	0.0000	0.1216
Total	1.5000e-004	7.0000e-005	9.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1215	0.1215	0.0000	0.0000	0.1216

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5516					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	0.5542	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	7.0000e-005	9.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1296	0.1296	1.0000e-005	0.0000	0.1297
Total	1.6000e-004	7.0000e-005	9.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1296	0.1296	1.0000e-005	0.0000	0.1297

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5516					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	0.5542	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	7.0000e-005	9.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1296	0.1296	1.0000e-005	0.0000	0.1297
Total	1.6000e-004	7.0000e-005	9.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1296	0.1296	1.0000e-005	0.0000	0.1297

Project Name:	Cypress Point Affordable Housing		
Project Size	71 Dwelling Units	5.8 total project acres disturbed	
	72941 s.f. residential	s.f. retail	
	s.f. office/commercial	3460 s.f. other, community room	
	13076 s.f. other, specify:	Complete ALL Portions in Yellow	
	s.f. parking garage	spaces	
Construction Hours	65,971 s.f. parking lot am to	142 spaces pm	

Qty	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Comments	Typical Equipment Type & Load Factors				
		Start Date:	6/1/2018		Total phase:	20	Overall Import/Export Volumes	OFFROAD Equipment Type	HP	Load Factor		
Demolition		End Date:						Aerial Lifts			62	0.31
1	Concrete/Industrial Saws	81	0.73	8	20	8	Demolition Volume	Air Compressors			78	0.48
3	Excavators	162	0.38	8	20	8	Square footage of buildings to be demolished	Bore/Drill Rigs			205	0.5
2	Rubber-Tired Dozers	255	0.4	8	20	8	(or total tons to be hauled)	Cement and Mortar Mixers			9	0.56
	Tractors/Loaders/Backhoes	97	0.37			0	? square feet or ? Hauling volume (tons)	Concrete/Industrial Saws			81	0.73
Site Preparation		Start Date:			Total phase:	10	Any pavement demolished and hauled? <u>? tons</u>	Cranes			226	0.29
		End Date:					Soil Hauling Volume	Crawler Tractors			208	0.43
	Graders	174	0.41			0		Crushing/Proc. Equipment			85	0.78
3	Rubber Tired Dozers	255	0.4	8	10	8	Export volume = ? cubic yards?	Dumpers/Tenders			16	0.38
4	Tractors/Loaders/Backhoes	97	0.37	8	10	8	Import volume = ? cubic yards?	Excavators			162	0.38
Grading / Excavation		Start Date:			Total phase:	30		Forklifts			89	0.2
		End Date:					Soil Hauling Volume	Generator Sets			84	0.74
2	Scrapers	361	0.48	8	30	8		Graders			174	0.41
2	Excavators	162	0.38	8	30	8	Export volume = cubic yards?	Off-Highway Tractors			122	0.44
1	Graders	174	0.41	8	30	8	Import volume = <u>7,000</u> cubic yards?	Off-Highway Trucks			400	0.38
	Rubber Tired Dozers	255	0.4			0		Other Construction Equipment			171	0.42
2	Tractors/Loaders/Backhoes	97	0.37	8	30	8		Other General Industrial Equipment			150	0.34
	Other Equipment?							Other Material Handling Equipment			167	0.4
Building - Exterior		Start Date:			Total phase:	300	Cement Trucks? ?? Total Round-Trips	Pavers			125	0.42
		End Date:						Paving Equipment			130	0.36
1	Cranes	226	0.29	7	300	7	Electric? (Y/N) ___ Otherwise assumed diesel	Plate Compactors			8	0.43
3	Forklifts	89	0.2	8	300	8	Liquid Propane (LPG)? (Y/N) ___ Otherwise Assumed diesel	Scrapers			361	0.48
1	Generator Sets	84	0.74	8	300	8	Or temporary line power? (Y/N) ___	Signal Boards			6	0.82
3	Tractors/Loaders/Backhoes	97	0.37	7	300	7	otherwise, assume diesel generator	Skid Steer Loaders			64	0.37
1	Welders	46	0.45	8	300	8		Surfacing Equipment			253	0.3
	Other Equipment?					0		Sweepers/Scrubbers			64	0.46
Building - Interior/Architectural Coating		Start Date:			Total phase:	20		Tractors/Loaders/Backhoes			97	0.37
		End Date:						Trenchers			80	0.5
1	Air Compressors	78	0.48	6	20	6		Welders			46	0.45
	Aerial Lift	62	0.31			0						
	Other Equipment?											
Paving		Start Date:			Total phase:	20		Asphalt? ___ cubic yards or ___ round trips?				
		Start Date:										
	Cement and Mortar Mixers	9	0.56			0						
2	Pavers	125	0.42	8	20	8						
2	Paving Equipment	130	0.36	8	20	8						
2	Rollers	80	0.38	8	20	8						
	Tractors/Loaders/Backhoes	97	0.37			0						
	Other Equipment?											

Equipment listed in this sheet is to provide an example of inputs
It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate
Modify horsepower or load factor, as appropriate

Cypress Point, Moss Beach, California								
DPM Emissions and Modeling Emission Rates								
Emissions Model	Activity	DPM (ton/year)	Area Source	DPM Emissions			Modeled Area (m ²)	DPM Emission Rate (g/s/m ²)
Year				(lb/yr)	(lb/hr)	(g/s)		
2018	Construction	0.1246	DPM	249.2	0.07586	9.56E-03	46,302	2.06E-07
2019	Construction	0.0924	DPM	184.8	0.05626	7.09E-03	46,302	1.53E-07
Total		0.2170		434.0	0.1321	0.0166		
		<i>Operation Hours</i>						
		hr/day =	9	(7am - 4pm)				
		days/yr =	365					
		hours/year =	3285					
		Old:	Adj.					
		2018	0.1409	0.884315117				
		2019	0.144	0.641666667				

Cypress Point, Moss Beach, California								
PM2.5 Fugitive Dust Emissions for Modeling								
Construction	Activity	Area Source	Area (ton/year)	PM2.5 Emissions			Modeled Area (m ²)	PM2.5 Emission Rate (g/s/m ²)
Year				(lb/yr)	(lb/hr)	(g/s)		
2018	Construction	FUG	0.0846	169.2	0.05151	6.49E-03	46,302	1.40E-07
2019	Construction	FUG	0.0014	2.8	0.00085	1.07E-04	46,302	2.32E-09
Total			0.086	172.0	0.0524	0.0066		
		<i>Operation Hours</i>						
		hr/day =	9	(7am - 4pm)				
		days/yr =	365					
		hours/year =	3285					
		Old:	Adj.					
		2018	0.1041	0.81268				
		2019	0.0011	1.272727				

Cypress Point, Moss Beach, California
Maximum DPM Cancer Risk Calculations From Construction
Impacts at Off-Site Receptors-1.5 meter

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

- Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

- Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Age --> Parameter	Infant/Child				Adult
	3rd Trimester	0 - 2	2 - 9	2 - 16	16 - 30
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Infant/Child - Exposure Information				Infant/Child Cancer		Adult - Exposure Information			Fugitive PM2.5	Total PM2.5
		Age	DPM Conc (ug/m3)		Age Sensitivity Factor	Risk (per million)	Modeled		Age Sensitivity Factor	Risk (per million)		
			Year	Annual			Year	Annual				
0	0.25	-0.25 - 0*	-	-	10	-	-	-	-	-	-	-
1	1	0 - 1	2018	0.1601	10	26.29	2018	0.1601	1	0.46	0.2498	0.410
2	1	1 - 2	2019	0.1191	10	19.57	2019	0.1191	1	0.34	0.0042	0.123
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						45.86				0.80		

* Third trimester of pregnancy

Cypress Point, Moss Beach, California						
Maximum Impacts at Construction MEI Location						
Emissions	Maximum Concentrations		Cancer Risk		Hazard Index	Maximum Annual PM2.5 Concentration
	Exhaust PM10/DPM	Fugitive PM2.5	(per million)			
Year	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	Child	Adult	(-)	($\mu\text{g}/\text{m}^3$)
2018	0.1601	0.2498	26.3	0.5	0.032	0.41
2019	0.1191	0.0042	19.6	0.3	0.024	0.12
Maximum	0.1601	0.2498	45.9	0.8	0.032	0.41
Old	0.181	0.30735				
	0.18566	0.00329				
	Adj.	Adj.				
	0.8843	0.8127				
	0.6417	1.2727				

**Bay Area Air Quality Management District
Risk & Hazard Stationary Source Inquiry Form**

This form is required when users request stationary source data from BAAQMD. This form is to be used with the BAAQMD's Google Earth stationary source screening tables. For guidance on conducting a risk & hazard screening, including for roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Table A: Requestor Contact Information	
Contact Name:	Josh Carman
Affiliation:	Hillingworth & Rodkin
Phone:	(707) 794-0400
Email:	jcarman@hillingworthandrodin.com
Date of Request:	11/13/2017
Project Name:	Cypress Point
Address:	Sierra St and Carlos St
City:	Moss Beach
County:	San Mateo
Type (residential, commercial, mixed use, industrial, etc.):	Residential
Project size (# of units, or building square feet):	71
Comments:	

For Air District assistance, the following steps must be completed:

Complete all the contact and project information requested in Table A. Incomplete forms will not be processed. Please include a project site map. Download and install the free program Google Earth, <http://www.google.com/earth/download/ge/>, and then download the county specific Google Earth stationary source application files from the District's website, <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>. The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration. Find the project site in Google Earth by inputting the site's address in the Google Earth search box. Using the Google Earth ruler function, measure the distance in feet between the project's fence line and the stationary source's fence line for all the sources that are within 1,000 feet of the project's fence line. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm that the source is within 1,000 feet of the project. Please report any mapping errors to the District (District contact information in Step 9). If the stationary source is within 1,000 feet of the project's fence line and the stationary source's information table does not list the cancer risk, hazard index, and PM2.5 concentration, and instead says to "Contact District Staff", list the stationary source information in Table B Section 1 below. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further. Email this completed form to District staff (Step 9). District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks. **Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request. Submit forms, maps, and questions to Alison Kirk at 415-749-5169, or akirk@baaqmd.gov.**



Table B: Stationary Sources within 1,000 feet of Receptor that say "Contact District Staff"												
Table B Section 1: Requestor fills out these columns based on Google Earth data				Table B Section 2: BAAQMD returns form with additional information in these columns as needed								
Distance from Receptor (feet)	Receptor	Plant # or Gas Dispensary #	Facility Name	Street Address	2012 Screening Level Cancer Risk (1)	2012 Screening Level Hazard Index (1)	2012 Screening Level PM2.5 (1)	Adjusted Risk	Adjusted HI	Adjusted PM	Distance to Threshold Cancer Risk	Multiplier
?		14546	Sewer Authority Mid-Coastside	16th St & Cabrillo Hwy	14.17	0.005	0.025					
			Adjusted to 450 feet		2.9	0.000	0.000					

Footnotes:

- These Cancer Risk, Hazard Index, and PM2.5 columns represent the rows in the Google Earth Plant Information Table that say "Contact District Staff" (Map A above). BAAQMD will return this form to you with this screening level information entered in these columns.
- Each plant may have multiple permits and sources.
- Fuel codes: 98 = diesel, 189 = Natural Gas.
- Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
- If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.
- The date that the HRSA was completed.
- Engineer who completed the HRSA. For District purposes only.
- All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
- The HRSA "Chronic Health" number represents the Hazard Index.
- Further information about common sources:
 - Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
 - The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or less. To be conservative, requestor should assume the cancer risk is 1 in a million and the hazard index is 0.003 for these sources.
 - BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010. Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
 - Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect the number of years perc use will continue after the project's residents or other sensitive receptors (such as students, patients, etc) take occupancy.
 - Gas stations can be adjusted using BAAQMD's Gas Station Distance Multiplier worksheet.
 - Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
 - This spray booth is considered to be insignificant.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
 DETAIL POLLUTANTS - ABATED
 MOST RECENT P/O APPROVED (2016)

Printed: NOV 14, 2017

Sewer Authority Mid-Coastside (P# 14546)

S#	SOURCE NAME	MATERIAL	SOURCE CODE	THROUGHPUT	DATE	POLLUTANT	CODE	LBS/DAY
1	Diesel Engine, Cummins model NT-855G, emergency standby							
	C2250098							
						Benzene	41	7.53E-04
						Formaldehyde	124	6.23E-05
						Organics (other, including	990	3.64E-02
						Arsenic (all)	1030	6.56E-07
						Beryllium (all) pollutant	1040	3.85E-07
						Cadmium	1070	1.64E-06
						Chromium (hexavalent)	1095	3.39E-08
						Lead (all) pollutant	1140	1.39E-06
						Manganese	1160	2.18E-06
						Nickel pollutant	1180	2.65E-05
						Mercury (all) pollutant	1190	4.64E-07
						Diesel Engine Exhaust Part	1350	3.79E-02
						PAH's (non-speciated)	1840	3.46E-06
						Nitrous Oxide (N2O)	2030	2.02E-04
						Nitrogen Oxides (part not	2990	5.30E-01
						Sulfur Dioxide (SO2)	3990	2.46E-04
						Carbon Monoxide (CO) pollu	4990	1.15E-01
						Carbon Dioxide, non-biogen	6960	2.52E+01
						Methane (CH4)	6970	1.01E-03



Cypress Point Affordable Housing, Moss Beach - San Mateo County, Annual

**Cypress Point Affordable Housing, Moss Beach
San Mateo County, Annual**

GHG Emissions

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	142.00	Space	0.00	65,971.00	0
Condo/Townhouse	71.00	Dwelling Unit	5.80	76,401.00	203

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Acreage from 6/13/2018 worksheet
- Construction Phase - default
- Trips and VMT - 0.5mi trip lengths to calculate risk from on- and near-site vehicle travel
- Grading - from 6/13/2018 worksheet
- Construction Off-road Equipment Mitigation - Tier 2 engines w/ DPF Level 3. BAAQMD BMPs

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblLandUse	LandUseSquareFeet	56,800.00	65,971.00
tblLandUse	LandUseSquareFeet	71,000.00	76,401.00
tblLandUse	LotAcreage	1.28	0.00
tblLandUse	LotAcreage	4.44	5.80
tblTripsAndVMT	HaulingTripNumber	0.00	692.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.2474	2.3867	1.5976	3.1300e-003	0.2024	0.1260	0.3284	0.0959	0.1177	0.2136	0.0000	286.3061	286.3061	0.0597	0.0000	287.7988
2019	0.7413	1.6781	1.4352	2.6900e-003	0.0498	0.0934	0.1431	0.0134	0.0877	0.1011	0.0000	240.6412	240.6412	0.0469	0.0000	241.8124
Maximum	0.7413	2.3867	1.5976	3.1300e-003	0.2024	0.1260	0.3284	0.0959	0.1177	0.2136	0.0000	286.3061	286.3061	0.0597	0.0000	287.7988

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1069	2.2222	1.6629	3.1300e-003	0.0816	0.0119	0.0935	0.0313	0.0118	0.0431	0.0000	286.3058	286.3058	0.0597	0.0000	287.7985
2019	0.6526	1.8904	1.5068	2.6900e-003	0.0498	0.0111	0.0609	0.0134	0.0110	0.0245	0.0000	240.6410	240.6410	0.0469	0.0000	241.8122
Maximum	0.6526	2.2222	1.6629	3.1300e-003	0.0816	0.0119	0.0935	0.0313	0.0118	0.0431	0.0000	286.3058	286.3058	0.0597	0.0000	287.7985

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	23.18	-1.18	-4.51	0.00	47.90	89.53	67.27	59.07	88.89	78.54	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2018	8-31-2018	1.3768	1.1336
2	9-1-2018	11-30-2018	0.9448	0.8982
3	12-1-2018	2-28-2019	0.8758	0.8851
4	3-1-2019	5-31-2019	0.8609	0.9002
5	6-1-2019	8-31-2019	0.9934	1.0520
		Highest	1.3768	1.1336

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5379	9.9000e-003	0.7558	4.8000e-004		0.0352	0.0352		0.0352	0.0352	3.2369	2.1932	5.4301	6.0500e-003	2.1000e-004	5.6446
Energy	8.7000e-003	0.0743	0.0316	4.7000e-004		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	196.0829	196.0829	6.6200e-003	2.6100e-003	197.0254

Mobile	0.1054	0.3353	1.1872	3.8500e-003	0.3435	4.2200e-003	0.3478	0.0923	3.9600e-003	0.0963	0.0000	351.8708	351.8708	0.0132	0.0000	352.2002
Waste						0.0000	0.0000		0.0000	0.0000	6.6297	0.0000	6.6297	0.3918	0.0000	16.4248
Water						0.0000	0.0000		0.0000	0.0000	1.4676	10.2512	11.7188	0.1512	3.6600e-003	16.5880
Total	0.6520	0.4196	1.9747	4.8000e-003	0.3435	0.0454	0.3889	0.0923	0.0451	0.1374	11.3342	560.3981	571.7322	0.5689	6.4800e-003	587.8829

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5379	9.9000e-003	0.7558	4.8000e-004		0.0352	0.0352		0.0352	0.0352	3.2369	2.1932	5.4301	6.0500e-003	2.1000e-004	5.6446
Energy	8.7000e-003	0.0743	0.0316	4.7000e-004		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	196.0829	196.0829	6.6200e-003	2.6100e-003	197.0254
Mobile	0.1054	0.3353	1.1872	3.8500e-003	0.3435	4.2200e-003	0.3478	0.0923	3.9600e-003	0.0963	0.0000	351.8708	351.8708	0.0132	0.0000	352.2002
Waste						0.0000	0.0000		0.0000	0.0000	6.6297	0.0000	6.6297	0.3918	0.0000	16.4248
Water						0.0000	0.0000		0.0000	0.0000	1.4676	10.2512	11.7188	0.1512	3.6600e-003	16.5880
Total	0.6520	0.4196	1.9747	4.8000e-003	0.3435	0.0454	0.3889	0.0923	0.0451	0.1374	11.3342	560.3981	571.7322	0.5689	6.4800e-003	587.8829

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2018	6/28/2018	5	20	

2	Site Preparation	Site Preparation	6/29/2018	7/12/2018	5	10
3	Grading	Grading	7/13/2018	8/9/2018	5	20
4	Building Construction	Building Construction	8/10/2018	6/27/2019	5	230
5	Paving	Paving	6/28/2019	7/25/2019	5	20
6	Architectural Coating	Architectural Coating	7/26/2019	8/22/2019	5	20

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 154,712; Residential Outdoor: 51,571; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Architectural Coating	Air Compressors	1	6.00	78	0.48
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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	692.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	79.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660
Total	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	3.6000e-004	3.6000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0482	1.0482	2.0000e-005	0.0000	1.0488
Total	4.9000e-004	3.6000e-004	3.6000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0482	1.0482	2.0000e-005	0.0000	1.0488

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.3266	0.2467	3.9000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660
Total	0.0126	0.3266	0.2467	3.9000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660

Mitigated Construction Off-Site

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.1000e-004	2.1600e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6289	0.6289	1.0000e-005	0.0000	0.6293
Total	2.9000e-004	2.1000e-004	2.1600e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6289	0.6289	1.0000e-005	0.0000	0.6293

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0500e-003	0.1686	0.1148	1.9000e-004		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total	6.0500e-003	0.1686	0.1148	1.9000e-004	0.0203	7.1000e-004	0.0210	0.0112	7.1000e-004	0.0119	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.1000e-004	2.1600e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6289	0.6289	1.0000e-005	0.0000	0.6293
Total	2.9000e-004	2.1000e-004	2.1600e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6289	0.6289	1.0000e-005	0.0000	0.6293

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total	0.0277	0.3067	0.1658	3.0000e-004	0.0655	0.0155	0.0810	0.0337	0.0143	0.0479	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6800e-003	0.1277	0.0462	2.9000e-004	5.7900e-003	5.3000e-004	6.3100e-003	1.5900e-003	5.0000e-004	2.0900e-003	0.0000	29.7401	29.7401	3.5400e-003	0.0000	29.8285
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	3.6000e-004	3.6000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0482	1.0482	2.0000e-005	0.0000	1.0488
Total	4.1700e-003	0.1281	0.0498	3.0000e-004	6.9700e-003	5.4000e-004	7.5000e-003	1.9000e-003	5.1000e-004	2.4100e-003	0.0000	30.7883	30.7883	3.5600e-003	0.0000	30.8773

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Fugitive Dust					0.0147	0.0000	0.0147	7.5800e-003	0.0000	7.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.2628	0.1899	3.0000e-004		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total	0.0101	0.2628	0.1899	3.0000e-004	0.0147	1.1600e-003	0.0159	7.5800e-003	1.1600e-003	8.7400e-003	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.6800e-003	0.1277	0.0462	2.9000e-004	5.7900e-003	5.3000e-004	6.3100e-003	1.5900e-003	5.0000e-004	2.0900e-003	0.0000	29.7401	29.7401	3.5400e-003	0.0000	29.8285
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	3.6000e-004	3.6000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0482	1.0482	2.0000e-005	0.0000	1.0488
Total	4.1700e-003	0.1281	0.0498	3.0000e-004	6.9700e-003	5.4000e-004	7.5000e-003	1.9000e-003	5.1000e-004	2.4100e-003	0.0000	30.7883	30.7883	3.5600e-003	0.0000	30.8773

3.5 Building Construction - 2018

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1367	1.1929	0.8966	1.3700e-003		0.0765	0.0765		0.0719	0.0719	0.0000	121.2613	121.2613	0.0297	0.0000	122.0040
Total	0.1367	1.1929	0.8966	1.3700e-003		0.0765	0.0765		0.0719	0.0719	0.0000	121.2613	121.2613	0.0297	0.0000	122.0040

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8900e-003	0.1247	0.0476	2.5000e-004	5.9800e-003	9.6000e-004	6.9400e-003	1.7300e-003	9.2000e-004	2.6500e-003	0.0000	24.8144	24.8144	2.2100e-003	0.0000	24.8696
Worker	0.0132	9.5600e-003	0.0967	3.1000e-004	0.0317	2.0000e-004	0.0319	8.4400e-003	1.9000e-004	8.6300e-003	0.0000	28.1541	28.1541	6.6000e-004	0.0000	28.1707
Total	0.0180	0.1343	0.1443	5.6000e-004	0.0377	1.1600e-003	0.0389	0.0102	1.1100e-003	0.0113	0.0000	52.9685	52.9685	2.8700e-003	0.0000	53.0403

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0551	1.2013	0.9116	1.3700e-003		6.9100e-003	6.9100e-003		6.9100e-003	6.9100e-003	0.0000	121.2612	121.2612	0.0297	0.0000	122.0039
Total	0.0551	1.2013	0.9116	1.3700e-003		6.9100e-003	6.9100e-003		6.9100e-003	6.9100e-003	0.0000	121.2612	121.2612	0.0297	0.0000	122.0039

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8900e-003	0.1247	0.0476	2.5000e-004	5.9800e-003	9.6000e-004	6.9400e-003	1.7300e-003	9.2000e-004	2.6500e-003	0.0000	24.8144	24.8144	2.2100e-003	0.0000	24.8696
Worker	0.0132	9.5600e-003	0.0967	3.1000e-004	0.0317	2.0000e-004	0.0319	8.4400e-003	1.9000e-004	8.6300e-003	0.0000	28.1541	28.1541	6.6000e-004	0.0000	28.1707
Total	0.0180	0.1343	0.1443	5.6000e-004	0.0377	1.1600e-003	0.0389	0.0102	1.1100e-003	0.0113	0.0000	52.9685	52.9685	2.8700e-003	0.0000	53.0403

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1511	1.3490	1.0985	1.7200e-003		0.0826	0.0826		0.0776	0.0776	0.0000	150.4667	150.4667	0.0367	0.0000	151.3831
Total	0.1511	1.3490	1.0985	1.7200e-003		0.0826	0.0826		0.0776	0.0776	0.0000	150.4667	150.4667	0.0367	0.0000	151.3831

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4700e-003	0.1471	0.0565	3.1000e-004	7.5100e-003	1.0200e-003	8.5200e-003	2.1700e-003	9.7000e-004	3.1400e-003	0.0000	30.8166	30.8166	2.7200e-003	0.0000	30.8846
Worker	0.0150	0.0105	0.1085	3.8000e-004	0.0398	2.6000e-004	0.0401	0.0106	2.4000e-004	0.0108	0.0000	34.2308	34.2308	7.3000e-004	0.0000	34.2491
Total	0.0204	0.1576	0.1650	6.9000e-004	0.0473	1.2800e-003	0.0486	0.0128	1.2100e-003	0.0140	0.0000	65.0473	65.0473	3.4500e-003	0.0000	65.1337

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0692	1.5075	1.1439	1.7200e-003		8.6700e-003	8.6700e-003		8.6700e-003	8.6700e-003	0.0000	150.4665	150.4665	0.0367	0.0000	151.3829
Total	0.0692	1.5075	1.1439	1.7200e-003		8.6700e-003	8.6700e-003		8.6700e-003	8.6700e-003	0.0000	150.4665	150.4665	0.0367	0.0000	151.3829

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4700e-003	0.1471	0.0565	3.1000e-004	7.5100e-003	1.0200e-003	8.5200e-003	2.1700e-003	9.7000e-004	3.1400e-003	0.0000	30.8166	30.8166	2.7200e-003	0.0000	30.8846
Worker	0.0150	0.0105	0.1085	3.8000e-004	0.0398	2.6000e-004	0.0401	0.0106	2.4000e-004	0.0108	0.0000	34.2308	34.2308	7.3000e-004	0.0000	34.2491
Total	0.0204	0.1576	0.1650	6.9000e-004	0.0473	1.2800e-003	0.0486	0.0128	1.2100e-003	0.0140	0.0000	65.0473	65.0473	3.4500e-003	0.0000	65.1337

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.1000e-004	3.2200e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0156	1.0156	2.0000e-005	0.0000	1.0161
Total	4.4000e-004	3.1000e-004	3.2200e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0156	1.0156	2.0000e-005	0.0000	1.0161

Mitigated Construction On-Site

Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	0.5542	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.3000e-004	3.4300e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.0833	1.0833	2.0000e-005	0.0000	1.0838
Total	4.7000e-004	3.3000e-004	3.4300e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.0833	1.0833	2.0000e-005	0.0000	1.0838

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5516					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1400e-003	0.0235	0.0183	3.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	0.5527	0.0235	0.0183	3.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.3000e-004	3.4300e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.0833	1.0833	2.0000e-005	0.0000	1.0838
Total	4.7000e-004	3.3000e-004	3.4300e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.0833	1.0833	2.0000e-005	0.0000	1.0838

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1054	0.3353	1.1872	3.8500e-003	0.3435	4.2200e-003	0.3478	0.0923	3.9600e-003	0.0963	0.0000	351.8708	351.8708	0.0132	0.0000	352.2002
Unmitigated	0.1054	0.3353	1.1872	3.8500e-003	0.3435	4.2200e-003	0.3478	0.0923	3.9600e-003	0.0963	0.0000	351.8708	351.8708	0.0132	0.0000	352.2002

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

Condo/Townhouse	412.51	402.57	343.64	926,733	926,733
Parking Lot	0.00	0.00	0.00		
Total	412.51	402.57	343.64	926,733	926,733

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741
Parking Lot	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	110.0037	110.0037	4.9700e-003	1.0300e-003	110.4347
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	110.0037	110.0037	4.9700e-003	1.0300e-003	110.4347
NaturalGas Mitigated	8.7000e-003	0.0743	0.0316	4.7000e-004		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	86.0792	86.0792	1.6500e-003	1.5800e-003	86.5907
NaturalGas Unmitigated	8.7000e-003	0.0743	0.0316	4.7000e-004		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	86.0792	86.0792	1.6500e-003	1.5800e-003	86.5907

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	1.61306e+006	8.7000e-003	0.0743	0.0316	4.7000e-004		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	86.0792	86.0792	1.6500e-003	1.5800e-003	86.5907
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.7000e-003	0.0743	0.0316	4.7000e-004		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	86.0792	86.0792	1.6500e-003	1.5800e-003	86.5907

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	1.61306e+006	8.7000e-003	0.0743	0.0316	4.7000e-004		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	86.0792	86.0792	1.6500e-003	1.5800e-003	86.5907
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.7000e-003	0.0743	0.0316	4.7000e-004		6.0100e-003	6.0100e-003		6.0100e-003	6.0100e-003	0.0000	86.0792	86.0792	1.6500e-003	1.5800e-003	86.5907

5.3 Energy by Land Use - Electricity

Unmitigated

Electricity Use	Total CO2	CH4	N2O	CO2e
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Land Use	kWh/yr	MT/yr			
Condo/Townhouse	355045	103.2866	4.6700e-003	9.7000e-004	103.6913
Parking Lot	23089.8	6.7171	3.0000e-004	6.0000e-005	6.7434
Total		110.0037	4.9700e-003	1.0300e-003	110.4347

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	355045	103.2866	4.6700e-003	9.7000e-004	103.6913
Parking Lot	23089.8	6.7171	3.0000e-004	6.0000e-005	6.7434
Total		110.0037	4.9700e-003	1.0300e-003	110.4347

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5379	9.9000e-003	0.7558	4.8000e-004		0.0352	0.0352		0.0352	0.0352	3.2369	2.1932	5.4301	6.0500e-003	2.1000e-004	5.6446

Unmitigated	0.5379	9.9000e-003	0.7558	4.8000e-004		0.0352	0.0352		0.0352	0.0352	3.2369	2.1932	5.4301	6.0500e-003	2.1000e-004	5.6446
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0552					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1638	3.7700e-003	0.2256	4.5000e-004		0.0323	0.0323		0.0323	0.0323	3.2369	1.3295	4.5664	5.2000e-003	2.1000e-004	4.7597
Landscaping	0.0162	6.1300e-003	0.5303	3.0000e-005		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	0.8637	0.8637	8.5000e-004	0.0000	0.8848
Total	0.5379	9.9000e-003	0.7558	4.8000e-004		0.0352	0.0352		0.0352	0.0352	3.2369	2.1932	5.4301	6.0500e-003	2.1000e-004	5.6446

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0552					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1638	3.7700e-003	0.2256	4.5000e-004		0.0323	0.0323		0.0323	0.0323	3.2369	1.3295	4.5664	5.2000e-003	2.1000e-004	4.7597
Landscaping	0.0162	6.1300e-003	0.5303	3.0000e-005		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	0.8637	0.8637	8.5000e-004	0.0000	0.8848

Total	0.5379	9.9000e-003	0.7558	4.8000e-004		0.0352	0.0352		0.0352	0.0352	3.2369	2.1932	5.4301	6.0500e-003	2.1000e-004	5.6446
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7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.7188	0.1512	3.6600e-003	16.5880
Unmitigated	11.7188	0.1512	3.6600e-003	16.5880

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	4.62594 / 2.91635	11.7188	0.1512	3.6600e-003	16.5880
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		11.7188	0.1512	3.6600e-003	16.5880

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	4.62594 / 2.91635	11.7188	0.1512	3.6600e-003	16.5880
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		11.7188	0.1512	3.6600e-003	16.5880

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.6297	0.3918	0.0000	16.4248
Unmitigated	6.6297	0.3918	0.0000	16.4248

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
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Land Use	tons	MT/yr			
		Total CO2	CH4	N2O	CO2e
Condo/Townhouse	32.66	6.6297	0.3918	0.0000	16.4248
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		6.6297	0.3918	0.0000	16.4248

Mitigated

Land Use	Waste Disposed tons	MT/yr			
		Total CO2	CH4	N2O	CO2e
Condo/Townhouse	32.66	6.6297	0.3918	0.0000	16.4248
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		6.6297	0.3918	0.0000	16.4248

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

APPENDIX B

2023 CalEEMod Results

Air Pollutant & GHG Emission Calculations

Cypress Point Affordable House Project Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Cypress Point Affordable House Project
Construction Start Date	12/1/2024
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.60
Precipitation (days)	41.0
Location	37.53401472727023, -122.51597955266524
County	San Mateo
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1226
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.13

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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Condo/Townhouse	71.0	Dwelling Unit	5.00	66,738	0.65	0.00	213	—
Parking Lot	142	Space	1.28	0.00	0.13	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Transportation	T-4	Integrate Affordable and Below Market Rate Housing
Energy	E-12-B	Install Electric Space Heater in Place of Natural Gas Heaters in Residences

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.45	33.5	46.2	47.8	0.13	1.75	17.6	19.4	1.61	4.78	6.39	—	14,156	14,156	0.90	0.62	10.4	14,374
Mit.	6.45	33.5	46.2	47.8	0.13	1.75	6.93	8.68	1.61	2.04	3.65	—	14,156	14,156	0.90	0.62	10.4	14,374
% Reduced	—	—	—	—	—	—	61%	55%	—	57%	43%	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.45	5.01	53.1	47.4	0.30	1.75	17.6	19.4	1.61	6.15	7.00	—	26,680	26,680	3.69	3.84	1.26	27,918
Mit.	6.45	5.01	53.1	47.4	0.30	1.75	9.90	10.8	1.61	3.34	4.19	—	26,680	26,680	3.69	3.84	1.26	27,918
% Reduced	—	—	—	—	—	—	44%	44%	—	46%	40%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	3.18	14.8	16.3	0.05	0.46	5.31	5.77	0.43	1.15	1.58	—	5,515	5,515	0.50	0.47	3.03	5,670
Mit.	1.99	3.18	14.8	16.3	0.05	0.46	2.28	2.74	0.43	0.58	1.00	—	5,515	5,515	0.50	0.47	3.03	5,670
% Reduced	—	—	—	—	—	—	57%	52%	—	50%	37%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	0.58	2.70	2.97	0.01	0.08	0.97	1.05	0.08	0.21	0.29	—	913	913	0.08	0.08	0.50	939
Mit.	0.36	0.58	2.70	2.97	0.01	0.08	0.42	0.50	0.08	0.11	0.18	—	913	913	0.08	0.08	0.50	939
% Reduced	—	—	—	—	—	—	57%	52%	—	50%	37%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	6.45	5.01	46.2	47.8	0.13	1.75	17.6	19.4	1.61	4.78	6.39	—	14,156	14,156	0.90	0.62	10.4	14,374
2026	1.96	33.5	12.5	17.3	0.03	0.51	4.46	4.97	0.47	0.52	0.99	—	4,104	4,104	0.18	0.08	2.10	4,136
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	2.80	1.71	21.8	24.9	0.08	0.57	5.12	5.69	0.53	0.81	1.34	—	7,983	7,983	0.87	0.84	0.29	8,257
2025	6.45	5.01	53.1	47.4	0.30	1.75	17.6	19.4	1.61	6.15	7.00	—	26,680	26,680	3.69	3.84	1.26	27,918
2026	3.56	2.80	24.4	32.7	0.07	0.88	8.10	8.98	0.82	1.04	1.86	—	8,605	8,605	0.53	0.41	0.19	8,739
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.17	0.10	1.32	1.50	< 0.005	0.03	0.31	0.34	0.03	0.05	0.08	—	484	484	0.05	0.05	0.29	501
2025	1.99	1.34	14.8	16.3	0.05	0.46	5.31	5.77	0.43	1.15	1.58	—	5,515	5,515	0.50	0.47	3.03	5,670
2026	0.71	3.18	4.82	6.46	0.01	0.18	1.65	1.82	0.16	0.21	0.37	—	1,684	1,684	0.10	0.08	0.58	1,709
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.03	0.02	0.24	0.27	< 0.005	0.01	0.06	0.06	0.01	0.01	0.01	—	80.2	80.2	0.01	0.01	0.05	83.0
2025	0.36	0.24	2.70	2.97	0.01	0.08	0.97	1.05	0.08	0.21	0.29	—	913	913	0.08	0.08	0.50	939
2026	0.13	0.58	0.88	1.18	< 0.005	0.03	0.30	0.33	0.03	0.04	0.07	—	279	279	0.02	0.01	0.10	283

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	6.45	5.01	46.2	47.8	0.13	1.75	6.93	8.68	1.61	2.04	3.65	—	14,156	14,156	0.90	0.62	10.4	14,374
2026	1.96	33.5	12.5	17.3	0.03	0.51	1.42	1.93	0.47	0.22	0.69	—	4,104	4,104	0.18	0.08	2.10	4,136
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.80	1.71	21.8	24.9	0.08	0.57	2.74	3.30	0.53	0.55	1.08	—	7,983	7,983	0.87	0.84	0.29	8,257
2025	6.45	5.01	53.1	47.4	0.30	1.75	9.90	10.8	1.61	3.34	4.19	—	26,680	26,680	3.69	3.84	1.26	27,918
2026	3.56	2.80	24.4	32.7	0.07	0.88	3.04	3.92	0.82	0.53	1.35	—	8,605	8,605	0.53	0.41	0.19	8,739
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	0.17	0.10	1.32	1.50	< 0.005	0.03	0.16	0.20	0.03	0.03	0.06	—	484	484	0.05	0.05	0.29	501
2025	1.99	1.34	14.8	16.3	0.05	0.46	2.28	2.74	0.43	0.58	1.00	—	5,515	5,515	0.50	0.47	3.03	5,670
2026	0.71	3.18	4.82	6.46	0.01	0.18	0.60	0.77	0.16	0.10	0.27	—	1,684	1,684	0.10	0.08	0.58	1,709
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.03	0.02	0.24	0.27	< 0.005	0.01	0.03	0.04	0.01	0.01	0.01	—	80.2	80.2	0.01	0.01	0.05	83.0
2025	0.36	0.24	2.70	2.97	0.01	0.08	0.42	0.50	0.08	0.11	0.18	—	913	913	0.08	0.08	0.50	939
2026	0.13	0.58	0.88	1.18	< 0.005	0.03	0.11	0.14	0.03	0.02	0.05	—	279	279	0.02	0.01	0.10	283

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,860	6,894	3.71	0.21	20.1	7,070
Mit.	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,858	6,892	3.71	0.21	20.1	7,068
% Reduced	—	—	< 0.5%	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.96	3.44	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,562	6,596	3.72	0.23	0.99	6,759
Mit.	1.96	3.44	1.88	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,560	6,594	3.72	0.23	0.99	6,757
% Reduced	—	—	< 0.5%	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,723	5,757	3.66	0.20	8.07	5,915
Mit.	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,721	5,755	3.66	0.20	8.07	5,914

% Reduced	—	—	< 0.5%	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979
Mit.	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	1%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	> -0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Area	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	197	197	0.03	< 0.005	—	199
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,860	6,894	3.71	0.21	20.1	7,070
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Area	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	197	197	0.03	< 0.005	—	199
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.96	3.44	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,562	6,596	3.72	0.23	0.99	6,759
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.73	1.54	1.59	16.9	0.05	0.03	2.11	2.14	0.03	0.37	0.40	—	5,506	5,506	0.18	0.18	7.59	5,572
Area	0.19	1.87	0.02	1.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	10.8	10.8	< 0.005	< 0.005	—	10.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	197	197	0.03	< 0.005	—	199
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,723	5,757	3.66	0.20	8.07	5,915
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Area	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	32.6	32.6	0.01	< 0.005	—	32.9
Water	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06
Waste	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Area	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235

Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	195	195	0.03	< 0.005	—	197
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,858	6,892	3.71	0.21	20.1	7,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Area	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	195	195	0.03	< 0.005	—	197
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.96	3.44	1.88	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,560	6,594	3.72	0.23	0.99	6,757
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.73	1.54	1.59	16.9	0.05	0.03	2.11	2.14	0.03	0.37	0.40	—	5,506	5,506	0.18	0.18	7.59	5,572
Area	0.19	1.87	0.02	1.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	10.8	10.8	< 0.005	< 0.005	—	10.9
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	195	195	0.03	< 0.005	—	197
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,721	5,755	3.66	0.20	8.07	5,914
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Area	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	32.3	32.3	0.01	< 0.005	—	32.6
Water	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

Waste	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.78	1.49	13.4	18.4	0.03	0.51	—	0.51	0.47	—	0.47	—	2,649	2,649	0.11	0.02	—	2,659
Demolition	—	—	—	—	—	—	0.99	0.99	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.82	8.82	< 0.005	< 0.005	< 0.005	9.26
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.11	< 0.005	0.03	—	0.03	0.03	—	0.03	—	161	161	0.01	< 0.005	—	161
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.12	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	348	348	0.01	0.01	0.04	352
Vendor	0.02	0.01	0.25	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	161
Hauling	0.88	0.11	8.03	5.00	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,823	4,823	0.74	0.78	0.25	5,076
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.04	21.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.32	9.32	< 0.005	< 0.005	0.01	9.76
Hauling	0.05	0.01	0.48	0.30	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	293	293	0.04	0.05	0.25	308
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.51	3.51	< 0.005	< 0.005	0.01	3.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.62
Hauling	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.5	48.5	0.01	0.01	0.04	51.0

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.78	1.49	13.4	18.4	0.03	0.51	—	0.51	0.47	—	0.47	—	2,649	2,649	0.11	0.02	—	2,659
Demolition	—	—	—	—	—	—	0.64	0.64	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.59	0.59	< 0.005	0.06	0.06	—	8.82	8.82	< 0.005	< 0.005	< 0.005	9.26
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.11	< 0.005	0.03	—	0.03	0.03	—	0.03	—	161	161	0.01	< 0.005	—	161
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.10	0.12	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	348	348	0.01	0.01	0.04	352
Vendor	0.02	0.01	0.25	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	161
Hauling	0.88	0.11	8.03	5.00	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,823	4,823	0.74	0.78	0.25	5,076
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.04	21.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.32	9.32	< 0.005	< 0.005	0.01	9.76
Hauling	0.05	0.01	0.48	0.30	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	293	293	0.04	0.05	0.25	308
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.51	3.51	< 0.005	< 0.005	0.01	3.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.62
Hauling	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.5	48.5	0.01	0.01	0.04	51.0

3.3. Demolition (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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.67	1.40	12.8	18.3	0.03	0.43	—	0.43	0.39	—	0.39	—	2,649	2,649	0.11	0.02	—	2,658
Demolition	—	—	—	—	—	—	0.99	0.99	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.42	0.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.1	88.1	< 0.005	< 0.005	—	88.4
Demolition	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.6
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.85	0.11	7.62	4.92	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,717	4,717	0.71	0.76	0.24	4,961
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.02	5.02	< 0.005	< 0.005	0.01	5.25
Hauling	0.03	< 0.005	0.25	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.02	0.03	0.13	165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Hauling	0.01	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.02	27.3

3.4. Demolition (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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.67	1.40	12.8	18.3	0.03	0.43	—	0.43	0.39	—	0.39	—	2,649	2,649	0.11	0.02	—	2,658
Demolition	—	—	—	—	—	—	0.64	0.64	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.59	0.59	< 0.005	0.06	0.06	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.42	0.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.1	88.1	< 0.005	< 0.005	—	88.4
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.6
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.85	0.11	7.62	4.92	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,717	4,717	0.71	0.76	0.24	4,961
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.02	5.02	< 0.005	< 0.005	0.01	5.25
Hauling	0.03	< 0.005	0.25	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.02	0.03	0.13	165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Hauling	0.01	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.02	27.3

3.5. Site Preparation (2025) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.81	1.52	14.7	15.1	0.02	0.63	—	0.63	0.58	—	0.58	—	2,594	2,594	0.11	0.02	—	2,603
Dust From Material Movement	—	—	—	—	—	—	8.58	8.58	—	4.27	4.27	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.80	0.83	< 0.005	0.03	—	0.03	0.03	—	0.03	—	142	142	0.01	< 0.005	—	143
Dust From Material Movement	—	—	—	—	—	—	0.47	0.47	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	4.25	0.55	38.1	24.6	0.27	0.27	5.56	5.83	0.27	1.52	1.79	—	23,587	23,587	3.56	3.78	1.21	24,804
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	—	18.7	18.7	< 0.005	< 0.005	0.03	19.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.27	8.27	< 0.005	< 0.005	0.01	8.65
Hauling	0.23	0.03	2.06	1.35	0.01	0.01	0.30	0.31	0.01	0.08	0.10	—	1,293	1,293	0.19	0.21	1.11	1,360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.10	3.10	< 0.005	< 0.005	< 0.005	3.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.43
Hauling	0.04	0.01	0.38	0.25	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	214	214	0.03	0.03	0.18	225

3.6. Site Preparation (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.81	1.52	14.7	15.1	0.02	0.63	—	0.63	0.58	—	0.58	—	2,594	2,594	0.11	0.02	—	2,603

Dust From Material Movement	—	—	—	—	—	—	3.35	3.35	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.59	0.59	< 0.005	0.06	0.06	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.80	0.83	< 0.005	0.03	—	0.03	0.03	—	0.03	—	142	142	0.01	< 0.005	—	143
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	4.25	0.55	38.1	24.6	0.27	0.27	5.56	5.83	0.27	1.52	1.79	—	23,587	23,587	3.56	3.78	1.21	24,804

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	—	18.7	18.7	< 0.005	< 0.005	0.03	19.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.27	8.27	< 0.005	< 0.005	0.01	8.65
Hauling	0.23	0.03	2.06	1.35	0.01	0.01	0.30	0.31	0.01	0.08	0.10	—	1,293	1,293	0.19	0.21	1.11	1,360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.10	3.10	< 0.005	< 0.005	< 0.005	3.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.43
Hauling	0.04	0.01	0.38	0.25	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	214	214	0.03	0.03	0.18	225

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	1.28	—	1.28	1.18	—	1.18	—	7,334	7,334	0.30	0.06	—	7,359
Dust From Material Movement	—	—	—	—	—	—	9.23	9.23	—	3.66	3.66	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.69	8.69	< 0.005	< 0.005	0.02	9.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	1.28	—	1.28	1.18	—	1.18	—	7,334	7,334	0.30	0.06	—	7,359

Dust From Material Movement	—	—	—	—	—	—	9.23	9.23	—	3.66	3.66	—	—	—	—	—	—	
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.40	0.34	2.91	2.62	0.01	0.12	—	0.12	0.11	—	0.11	—	703	703	0.03	0.01	—	706
Dust From Material Movement	—	—	—	—	—	—	0.88	0.88	—	0.35	0.35	—	—	—	—	—	—	
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.25	0.25	< 0.005	0.03	0.03	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.07	0.06	0.53	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	116	116	< 0.005	< 0.005	—	117
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.06	0.06	—	—	—	—	—	—	
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.11	0.10	0.08	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	360	360	0.01	< 0.005	1.19	362
Vendor	0.02	0.01	0.22	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.37	158
Hauling	0.26	0.03	2.18	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	2.80	1,491
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.26	0.03	2.29	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	0.07	1,488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.7	32.7	< 0.005	< 0.005	0.05	33.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.5	14.5	< 0.005	< 0.005	0.02	15.1
Hauling	0.02	< 0.005	0.22	0.14	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	136	136	0.02	0.02	0.12	143
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.42	5.42	< 0.005	< 0.005	0.01	5.50
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.51
Hauling	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.5	22.5	< 0.005	< 0.005	0.02	23.6

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	1.28	—	1.28	1.18	—	1.18	—	7,334	7,334	0.30	0.06	—	7,359
Dust From Material Movement	—	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.59	0.59	< 0.005	0.06	0.06	—	8.69	8.69	< 0.005	< 0.005	0.02	9.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	1.28	—	1.28	1.18	—	1.18	—	7,334	7,334	0.30	0.06	—	7,359
Dust From Material Movement	—	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.59	0.59	< 0.005	0.06	0.06	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	2.91	2.62	0.01	0.12	—	0.12	0.11	—	0.11	—	703	703	0.03	0.01	—	706
Dust From Material Movement	—	—	—	—	—	—	0.35	0.35	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.53	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	116	116	< 0.005	< 0.005	—	117
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.08	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	360	360	0.01	< 0.005	1.19	362
Vendor	0.02	0.01	0.22	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.37	158
Hauling	0.26	0.03	2.18	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	2.80	1,491

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.26	0.03	2.29	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	0.07	1,488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.7	32.7	< 0.005	< 0.005	0.05	33.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.5	14.5	< 0.005	< 0.005	0.02	15.1
Hauling	0.02	< 0.005	0.22	0.14	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	136	136	0.02	0.02	0.12	143
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.42	5.42	< 0.005	< 0.005	0.01	5.50
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.51
Hauling	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.5	22.5	< 0.005	< 0.005	0.02	23.6

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.92	3.92	< 0.005	0.39	0.39	—	13.0	13.0	< 0.005	< 0.005	0.03	13.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.92	3.92	< 0.005	0.39	0.39	—	13.0	13.0	< 0.005	< 0.005	< 0.005	13.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	6.25	7.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,436	1,436	0.06	0.01	—	1,441
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.35	2.35	< 0.005	0.23	0.23	—	7.80	7.80	< 0.005	< 0.005	0.01	8.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.14	1.43	< 0.005	0.05	—	0.05	0.04	—	0.04	—	238	238	0.01	< 0.005	—	239
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.43	0.43	< 0.005	0.04	0.04	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.35
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.15	2.62	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	703	703	0.01	0.01	2.33	707
Vendor	0.03	0.01	0.30	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.50	211
Hauling	0.28	0.04	2.42	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,573	1,573	0.24	0.25	3.11	1,657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.20	2.40	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	664	664	0.01	0.03	0.06	672
Vendor	0.03	0.01	0.31	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.01	210
Hauling	0.28	0.04	2.54	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,572	1,572	0.24	0.25	0.08	1,654
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.11	1.40	0.00	0.00	0.41	0.41	0.00	0.10	0.10	—	399	399	0.01	0.02	0.60	404
Vendor	0.02	< 0.005	0.18	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.13	126

Hauling	0.17	0.02	1.50	0.99	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	942	942	0.14	0.15	0.81	991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	0.10	67.0
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.9
Hauling	0.03	< 0.005	0.27	0.18	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.02	0.03	0.13	164

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.88	0.88	< 0.005	0.09	0.09	—	13.0	13.0	< 0.005	< 0.005	0.03	13.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.88	0.88	< 0.005	0.09	0.09	—	13.0	13.0	< 0.005	< 0.005	< 0.005	13.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	6.25	7.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,436	1,436	0.06	0.01	—	1,441
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.53	0.53	< 0.005	0.05	0.05	—	7.80	7.80	< 0.005	< 0.005	0.01	8.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.12	1.14	1.43	< 0.005	0.05	—	0.05	0.04	—	0.04	—	238	238	0.01	< 0.005	—	239
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.35
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.15	2.62	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	703	703	0.01	0.01	2.33	707
Vendor	0.03	0.01	0.30	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.50	211
Hauling	0.28	0.04	2.42	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,573	1,573	0.24	0.25	3.11	1,657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.20	2.40	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	664	664	0.01	0.03	0.06	672
Vendor	0.03	0.01	0.31	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.01	210
Hauling	0.28	0.04	2.54	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,572	1,572	0.24	0.25	0.08	1,654
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.11	1.40	0.00	0.00	0.41	0.41	0.00	0.10	0.10	—	399	399	0.01	0.02	0.60	404
Vendor	0.02	< 0.005	0.18	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.13	126
Hauling	0.17	0.02	1.50	0.99	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	942	942	0.14	0.15	0.81	991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	0.10	67.0
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.9
Hauling	0.03	< 0.005	0.27	0.18	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.02	0.03	0.13	164

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.92	3.92	< 0.005	0.39	0.39	—	12.8	12.8	< 0.005	< 0.005	< 0.005	13.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.70	2.23	< 0.005	0.07	—	0.07	0.06	—	0.06	—	413	413	0.02	< 0.005	—	414
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.68	0.68	< 0.005	0.07	0.07	—	2.21	2.21	< 0.005	< 0.005	< 0.005	2.31
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.3	68.3	< 0.005	< 0.005	—	68.6
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.18	2.22	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	650	650	0.01	0.03	0.05	659
Vendor	0.03	0.01	0.29	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	197	197	0.02	0.03	0.01	206
Hauling	0.26	0.04	2.42	1.63	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,537	1,537	0.23	0.24	0.08	1,616

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.15	114
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.0	34.0	< 0.005	< 0.005	0.03	35.6
Hauling	0.05	0.01	0.41	0.28	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	265	265	0.04	0.04	0.22	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.6	18.6	< 0.005	< 0.005	0.03	18.9
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	0.01	5.89
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.8	43.8	0.01	0.01	0.04	46.1

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.88	0.88	< 0.005	0.09	0.09	—	12.8	12.8	< 0.005	< 0.005	< 0.005	13.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.70	2.23	< 0.005	0.07	—	0.07	0.06	—	0.06	—	413	413	0.02	< 0.005	—	414
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.15	0.15	< 0.005	0.02	0.02	—	2.21	2.21	< 0.005	< 0.005	< 0.005	2.31
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.03	0.31	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.3	68.3	< 0.005	< 0.005	—	68.6
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.18	2.22	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	650	650	0.01	0.03	0.05	659
Vendor	0.03	0.01	0.29	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	197	197	0.02	0.03	0.01	206
Hauling	0.26	0.04	2.42	1.63	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,537	1,537	0.23	0.24	0.08	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.15	114
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.0	34.0	< 0.005	< 0.005	0.03	35.6
Hauling	0.05	0.01	0.41	0.28	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	265	265	0.04	0.04	0.22	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.6	18.6	< 0.005	< 0.005	0.03	18.9
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	0.01	5.89
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.8	43.8	0.01	0.01	0.04	46.1

3.13. Paving (2026) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.48	—	0.48	0.44	—	0.44	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.54	8.54	< 0.005	< 0.005	0.02	8.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.48	—	0.48	0.44	—	0.44	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.54	8.54	< 0.005	< 0.005	< 0.005	8.95
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	2.42	3.11	0.01	0.11	—	0.11	0.10	—	0.10	—	694	694	0.03	0.01	—	696
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.57	0.57	< 0.005	0.06	0.06	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.44	0.57	< 0.005	0.02	—	0.02	0.02	—	0.02	—	115	115	< 0.005	< 0.005	—	115
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.08	1.24	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	353	353	0.01	< 0.005	1.05	355
Vendor	0.02	0.01	0.21	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.35	155
Hauling	0.03	< 0.005	0.23	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.30	162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.09	1.14	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	0.01	0.01	0.03	338
Vendor	0.02	0.01	0.22	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.01	155
Hauling	0.03	< 0.005	0.24	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.3	73.3	< 0.005	< 0.005	0.10	74.4
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.4	32.4	< 0.005	< 0.005	0.03	34.0
Hauling	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.7	33.7	< 0.005	0.01	0.03	35.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.02	12.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.37	5.37	< 0.005	< 0.005	0.01	5.62
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.58	5.58	< 0.005	< 0.005	< 0.005	5.87

3.14. Paving (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.48	—	0.48	0.44	—	0.44	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.59	0.59	< 0.005	0.06	0.06	—	8.54	8.54	< 0.005	< 0.005	0.02	8.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.48	—	0.48	0.44	—	0.44	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.59	0.59	< 0.005	0.06	0.06	—	8.54	8.54	< 0.005	< 0.005	< 0.005	8.95
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	2.42	3.11	0.01	0.11	—	0.11	0.10	—	0.10	—	694	694	0.03	0.01	—	696
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.13	0.13	< 0.005	0.01	0.01	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.44	0.57	< 0.005	0.02	—	0.02	0.02	—	0.02	—	115	115	< 0.005	< 0.005	—	115
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.24	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	353	353	0.01	< 0.005	1.05	355
Vendor	0.02	0.01	0.21	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.35	155
Hauling	0.03	< 0.005	0.23	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.30	162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.09	1.14	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	0.01	0.01	0.03	338
Vendor	0.02	0.01	0.22	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.01	155
Hauling	0.03	< 0.005	0.24	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.3	73.3	< 0.005	< 0.005	0.10	74.4
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.4	32.4	< 0.005	< 0.005	0.03	34.0
Hauling	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.7	33.7	< 0.005	0.01	0.03	35.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.02	12.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.37	5.37	< 0.005	< 0.005	0.01	5.62
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.58	5.58	< 0.005	< 0.005	< 0.005	5.87

3.15. Architectural Coating (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	31.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	1.31	1.31	< 0.005	0.13	0.13	—	4.27	4.27	< 0.005	< 0.005	0.01	4.49
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Architectural Coatings	—	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.82	1.82	< 0.005	< 0.005	—	1.82
Architectural Coatings	—	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.31	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.3	88.3	< 0.005	< 0.005	0.26	88.7
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.4	49.4	< 0.005	0.01	0.12	51.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.97
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	< 0.005	4.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	31.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.29	0.29	< 0.005	0.03	0.03	—	4.27	4.27	< 0.005	< 0.005	0.01	4.49
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Architect ural Coatings	—	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.82	1.82	< 0.005	< 0.005	—	1.82
Architectural Coatings	—	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.31	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.3	88.3	< 0.005	< 0.005	0.26	88.7
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.4	49.4	< 0.005	0.01	0.12	51.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.97
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	< 0.005	4.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	171
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	171
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.51	4.51	< 0.005	< 0.005	—	4.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	32.6	32.6	0.01	< 0.005	—	32.9

4.2.2. Electricity Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	172
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	172
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	28.2	28.2	< 0.005	< 0.005	—	28.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.51	4.51	< 0.005	< 0.005	—	4.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	32.7	32.7	0.01	< 0.005	—	33.0

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Condo/T	0.00	0.00	0.00	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	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	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	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	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	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-0.41	-0.41	> -0.005	> -0.005	—	-0.41
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-0.41	-0.41	> -0.005	> -0.005	—	-0.41

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	0.38	0.36	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.8
Total	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.91	0.91	< 0.005	< 0.005	—	0.92
Consumer Products	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Total	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80

4.3.1. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.38	0.36	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.8
Total	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.91	0.91	< 0.005	< 0.005	—	0.92
Consumer Products	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.03	0.03	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Total	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

4.4.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1

4.5.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.6.2. Mitigated

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

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

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Daily, Summer (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Daily, Winter (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Annual	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	12/1/2024	1/17/2025	5.00	35.0	—
Site Preparation	Site Preparation	1/18/2025	2/15/2025	5.00	20.0	—
Grading	Grading	2/16/2025	4/05/2025	5.00	35.0	—
Building Construction 1	Building Construction	3/1/2025	3/29/2026	5.00	280	—
Paving	Paving	3/2/2026	6/20/2026	5.00	80.0	—
Architectural Coating	Architectural Coating	5/10/2026	6/20/2026	5.00	30.0	—

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
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Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	5.00	8.00	36.0	0.38
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	5.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Building Construction 1	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction 1	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction 1	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction 1	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction 1	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	3.00	8.00	81.0	0.42
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Graders	Diesel	Average	1.00	1.00	148	0.41
Paving	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Paving	Scrapers	Diesel	Average	1.00	1.00	423	0.48
Paving	Plate Compactors	Diesel	Average	1.00	1.00	8.00	0.43

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
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5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	5.00	8.00	36.0	0.38
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	5.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Building Construction 1	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction 1	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction 1	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction 1	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction 1	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	3.00	8.00	81.0	0.42
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Paving	Graders	Diesel	Average	1.00	1.00	148	0.41
Paving	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Paving	Scrapers	Diesel	Average	1.00	1.00	423	0.48
Paving	Plate Compactors	Diesel	Average	1.00	1.00	8.00	0.43
Architectural Coating	Air Compressors	Diesel	Average	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	40.0	12.8	LDA,LDT1,LDT2
Demolition	Vendor	6.00	7.30	HHDT,MHDT
Demolition	Hauling	60.0	20.0	HHDT
Demolition	Onsite truck	2.00	1.00	HHDT,MHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	40.0	12.8	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	7.30	HHDT,MHDT
Site Preparation	Hauling	300	20.0	HHDT
Site Preparation	Onsite truck	2.00	1.00	HHDT,MHDT
Grading	—	—	—	—
Grading	Worker	40.0	12.8	LDA,LDT1,LDT2
Grading	Vendor	6.00	7.30	HHDT,MHDT
Grading	Hauling	18.0	20.0	HHDT
Grading	Onsite truck	2.00	1.00	HHDT,MHDT
Building Construction 1	—	—	—	—
Building Construction 1	Worker	78.0	12.8	LDA,LDT1,LDT2

Building Construction 1	Vendor	8.00	7.30	HHDT,MHDT
Building Construction 1	Hauling	20.0	20.0	HHDT
Building Construction 1	Onsite truck	3.00	1.00	HHDT,MHDT
Paving	—	—	—	—
Paving	Worker	40.0	12.8	LDA,LDT1,LDT2
Paving	Vendor	6.00	7.30	HHDT,MHDT
Paving	Hauling	2.00	20.0	HHDT
Paving	Onsite truck	2.00	1.00	HHDT,MHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	12.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.30	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	1.00	1.00	HHDT,MHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	40.0	12.8	LDA,LDT1,LDT2
Demolition	Vendor	6.00	7.30	HHDT,MHDT
Demolition	Hauling	60.0	20.0	HHDT
Demolition	Onsite truck	2.00	1.00	HHDT,MHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	40.0	12.8	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	7.30	HHDT,MHDT
Site Preparation	Hauling	300	20.0	HHDT
Site Preparation	Onsite truck	2.00	1.00	HHDT,MHDT
Grading	—	—	—	—

Grading	Worker	40.0	12.8	LDA,LDT1,LDT2
Grading	Vendor	6.00	7.30	HHDT,MHDT
Grading	Hauling	18.0	20.0	HHDT
Grading	Onsite truck	2.00	1.00	HHDT,MHDT
Building Construction 1	—	—	—	—
Building Construction 1	Worker	78.0	12.8	LDA,LDT1,LDT2
Building Construction 1	Vendor	8.00	7.30	HHDT,MHDT
Building Construction 1	Hauling	20.0	20.0	HHDT
Building Construction 1	Onsite truck	3.00	1.00	HHDT,MHDT
Paving	—	—	—	—
Paving	Worker	40.0	12.8	LDA,LDT1,LDT2
Paving	Vendor	6.00	7.30	HHDT,MHDT
Paving	Hauling	2.00	20.0	HHDT
Paving	Onsite truck	2.00	1.00	HHDT,MHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	12.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.30	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	1.00	1.00	HHDT,MHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
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Architectural Coating	135,144	45,048	0.00	0.00	3,340
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5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,500	—
Site Preparation	66,738	0.00	15.0	0.00	—
Grading	7,500	0.00	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.28

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Parking Lot	1.28	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005
2026	0.00	204	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
Condo/Townhouse	520	578	446	188,883	7,753	8,622	6,652	2,817,745
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
Condo/Townhouse	520	578	446	188,883	7,753	8,622	6,652	2,817,745
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

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	36
No Fireplaces	35
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0
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5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	36
No Fireplaces	35
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
135144.44999999998	45,048	0.00	0.00	3,340

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)
Condo/Townhouse	303,489	204	0.0330	0.0040	0.00
Parking Lot	48,767	204	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	304,499	204	0.0330	0.0040	-7,716
Parking Lot	48,767	204	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)
Condo/Townhouse	2,574,914	6.59
Parking Lot	0.00	1.08

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
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Condo/Townhouse	2,574,914	6.59
Parking Lot	0.00	1.08

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	54.7	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	54.7	—
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
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	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
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Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	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
—	—

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	8.54	annual days of extreme heat
Extreme Precipitation	6.90	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	14.3	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	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.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
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Exposure Indicators	—
AQ-Ozone	7.52
AQ-PM	14.5
AQ-DPM	30.0
Drinking Water	48.2
Lead Risk Housing	23.7
Pesticides	82.8
Toxic Releases	28.0
Traffic	21.1
Effect Indicators	—
CleanUp Sites	46.1
Groundwater	30.9
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	38.6
Cardio-vascular	20.9
Low Birth Weights	60.1
Socioeconomic Factor Indicators	—
Education	14.8
Housing	42.3
Linguistic	0.00
Poverty	6.73
Unemployment	1.15

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	91.03041191
Employed	89.79853715
Median HI	83.63916335
Education	—
Bachelor's or higher	78.91697677
High school enrollment	100
Preschool enrollment	88.41267804
Transportation	—
Auto Access	43.87270627
Active commuting	72.95008341
Social	—
2-parent households	52.82946234
Voting	91.50519697
Neighborhood	—
Alcohol availability	59.74592583
Park access	35.26241499
Retail density	11.88245862
Supermarket access	2.399589375
Tree canopy	93.41716925
Housing	—
Homeownership	81.12408572
Housing habitability	44.70678814
Low-inc homeowner severe housing cost burden	43.85987425
Low-inc renter severe housing cost burden	88.29718979
Uncrowded housing	33.18362633

Health Outcomes	—
Insured adults	88.86179905
Arthritis	0.0
Asthma ER Admissions	65.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	54.6
Cognitively Disabled	26.7
Physically Disabled	29.8
Heart Attack ER Admissions	91.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	68.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	7.9
SLR Inundation Area	31.3

Children	71.1
Elderly	28.7
English Speaking	74.8
Foreign-born	17.8
Outdoor Workers	33.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.3
Traffic Density	2.3
Traffic Access	23.0
Other Indices	—
Hardship	23.7
Other Decision Support	—
2016 Voting	92.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	11.0
Healthy Places Index Score for Project Location (b)	90.0
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	Updated acreages 4/2023
Construction: Trips and VMT	Added onsite travel with mixed vehicles
Construction: Construction Phases	Approximately 18 month construction duration
Construction: Dust From Material Movement	Site Prep Building materials would be transported to the site Grading import approximately 7,500 cubic yards of fill
Operations: Energy Use	No natural gas
Operations: Hearths	No natural gas
Construction: Off-Road Equipment	Modified with Midpen inputs
Construction: Demolition	20,840 CY of site concrete to demo accounted for in haul trips

APPENDIX C

2023 CalEEMod Mitigated Results Air Pollutant & GHG Emission Calculations

Cypress Point Affordable House Project Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Cypress Point Affordable House Project
Construction Start Date	12/1/2024
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.60
Precipitation (days)	41.0
Location	37.53401472727023, -122.51597955266524
County	San Mateo
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1226
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.13

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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Condo/Townhouse	71.0	Dwelling Unit	5.00	66,738	0.65	0.00	213	—
Parking Lot	142	Space	1.28	0.00	0.13	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-6	Use Diesel Particulate Filters
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Transportation	T-4	Integrate Affordable and Below Market Rate Housing
Energy	E-12-B	Install Electric Space Heater in Place of Natural Gas Heaters in Residences

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.45	33.5	46.2	47.8	0.13	1.75	17.6	19.4	1.61	4.78	6.39	—	14,156	14,156	0.90	0.62	10.4	14,374
Mit.	6.45	33.5	46.2	47.8	0.13	0.35	7.11	7.45	0.32	2.06	2.38	—	14,156	14,156	0.90	0.62	10.4	14,374
% Reduced	—	—	—	—	—	80%	60%	62%	80%	57%	63%	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.45	5.01	53.1	47.4	0.30	1.75	17.6	19.4	1.61	6.15	7.00	—	26,680	26,680	3.69	3.84	1.26	27,918
Mit.	6.45	5.01	53.1	47.4	0.30	0.37	9.97	10.3	0.36	3.35	3.71	—	26,680	26,680	3.69	3.84	1.26	27,918
% Reduced	—	—	—	—	—	79%	43%	47%	78%	46%	47%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	3.18	14.8	16.3	0.05	0.46	5.31	5.77	0.43	1.15	1.58	—	5,515	5,515	0.50	0.47	3.03	5,670
Mit.	1.99	3.18	14.8	16.3	0.05	0.11	2.36	2.47	0.11	0.58	0.69	—	5,515	5,515	0.50	0.47	3.03	5,670
% Reduced	—	—	—	—	—	75%	56%	57%	75%	49%	56%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	0.58	2.70	2.97	0.01	0.08	0.97	1.05	0.08	0.21	0.29	—	913	913	0.08	0.08	0.50	939
Mit.	0.36	0.58	2.70	2.97	0.01	0.02	0.43	0.45	0.02	0.11	0.13	—	913	913	0.08	0.08	0.50	939
% Reduced	—	—	—	—	—	75%	56%	57%	75%	49%	56%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	6.45	5.01	46.2	47.8	0.13	1.75	17.6	19.4	1.61	4.78	6.39	—	14,156	14,156	0.90	0.62	10.4	14,374
2026	1.96	33.5	12.5	17.3	0.03	0.51	4.46	4.97	0.47	0.52	0.99	—	4,104	4,104	0.18	0.08	2.10	4,136
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	2.80	1.71	21.8	24.9	0.08	0.57	5.12	5.69	0.53	0.81	1.34	—	7,983	7,983	0.87	0.84	0.29	8,257
2025	6.45	5.01	53.1	47.4	0.30	1.75	17.6	19.4	1.61	6.15	7.00	—	26,680	26,680	3.69	3.84	1.26	27,918
2026	3.56	2.80	24.4	32.7	0.07	0.88	8.10	8.98	0.82	1.04	1.86	—	8,605	8,605	0.53	0.41	0.19	8,739
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.17	0.10	1.32	1.50	< 0.005	0.03	0.31	0.34	0.03	0.05	0.08	—	484	484	0.05	0.05	0.29	501
2025	1.99	1.34	14.8	16.3	0.05	0.46	5.31	5.77	0.43	1.15	1.58	—	5,515	5,515	0.50	0.47	3.03	5,670
2026	0.71	3.18	4.82	6.46	0.01	0.18	1.65	1.82	0.16	0.21	0.37	—	1,684	1,684	0.10	0.08	0.58	1,709
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.03	0.02	0.24	0.27	< 0.005	0.01	0.06	0.06	0.01	0.01	0.01	—	80.2	80.2	0.01	0.01	0.05	83.0
2025	0.36	0.24	2.70	2.97	0.01	0.08	0.97	1.05	0.08	0.21	0.29	—	913	913	0.08	0.08	0.50	939
2026	0.13	0.58	0.88	1.18	< 0.005	0.03	0.30	0.33	0.03	0.04	0.07	—	279	279	0.02	0.01	0.10	283

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	6.45	5.01	46.2	47.8	0.13	0.35	7.11	7.45	0.32	2.06	2.38	—	14,156	14,156	0.90	0.62	10.4	14,374
2026	1.96	33.5	12.5	17.3	0.03	0.08	1.53	1.61	0.08	0.23	0.30	—	4,104	4,104	0.18	0.08	2.10	4,136
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.80	1.71	21.8	24.9	0.08	0.13	2.81	2.94	0.13	0.56	0.69	—	7,983	7,983	0.87	0.84	0.29	8,257
2025	6.45	5.01	53.1	47.4	0.30	0.37	9.97	10.3	0.36	3.35	3.71	—	26,680	26,680	3.69	3.84	1.26	27,918
2026	3.56	2.80	24.4	32.7	0.07	0.18	3.21	3.39	0.17	0.55	0.72	—	8,605	8,605	0.53	0.41	0.19	8,739
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	0.17	0.10	1.32	1.50	< 0.005	0.01	0.17	0.18	0.01	0.03	0.04	—	484	484	0.05	0.05	0.29	501
2025	1.99	1.34	14.8	16.3	0.05	0.11	2.36	2.47	0.11	0.58	0.69	—	5,515	5,515	0.50	0.47	3.03	5,670
2026	0.71	3.18	4.82	6.46	0.01	0.04	0.63	0.67	0.03	0.11	0.14	—	1,684	1,684	0.10	0.08	0.58	1,709
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.03	0.02	0.24	0.27	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	80.2	80.2	0.01	0.01	0.05	83.0
2025	0.36	0.24	2.70	2.97	0.01	0.02	0.43	0.45	0.02	0.11	0.13	—	913	913	0.08	0.08	0.50	939
2026	0.13	0.58	0.88	1.18	< 0.005	0.01	0.12	0.12	0.01	0.02	0.03	—	279	279	0.02	0.01	0.10	283

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,860	6,894	3.71	0.21	20.1	7,070
Mit.	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,858	6,892	3.71	0.21	20.1	7,068
% Reduced	—	—	< 0.5%	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.96	3.44	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,562	6,596	3.72	0.23	0.99	6,759
Mit.	1.96	3.44	1.88	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,560	6,594	3.72	0.23	0.99	6,757
% Reduced	—	—	< 0.5%	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,723	5,757	3.66	0.20	8.07	5,915
Mit.	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,721	5,755	3.66	0.20	8.07	5,914

% Reduced	—	—	< 0.5%	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979
Mit.	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	1%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	> -0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Area	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	197	197	0.03	< 0.005	—	199
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,860	6,894	3.71	0.21	20.1	7,070
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Area	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	197	197	0.03	< 0.005	—	199
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.96	3.44	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,562	6,596	3.72	0.23	0.99	6,759
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.73	1.54	1.59	16.9	0.05	0.03	2.11	2.14	0.03	0.37	0.40	—	5,506	5,506	0.18	0.18	7.59	5,572
Area	0.19	1.87	0.02	1.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	10.8	10.8	< 0.005	< 0.005	—	10.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	197	197	0.03	< 0.005	—	199
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,723	5,757	3.66	0.20	8.07	5,915
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Area	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	32.6	32.6	0.01	< 0.005	—	32.9
Water	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06
Waste	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Area	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235

Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	195	195	0.03	< 0.005	—	197
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,858	6,892	3.71	0.21	20.1	7,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Area	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	195	195	0.03	< 0.005	—	197
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.96	3.44	1.88	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,560	6,594	3.72	0.23	0.99	6,757
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.73	1.54	1.59	16.9	0.05	0.03	2.11	2.14	0.03	0.37	0.40	—	5,506	5,506	0.18	0.18	7.59	5,572
Area	0.19	1.87	0.02	1.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	10.8	10.8	< 0.005	< 0.005	—	10.9
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	195	195	0.03	< 0.005	—	197
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,721	5,755	3.66	0.20	8.07	5,914
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Area	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	32.3	32.3	0.01	< 0.005	—	32.6
Water	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

Waste	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.78	1.49	13.4	18.4	0.03	0.51	—	0.51	0.47	—	0.47	—	2,649	2,649	0.11	0.02	—	2,659
Demolition	—	—	—	—	—	—	0.99	0.99	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.82	8.82	< 0.005	< 0.005	< 0.005	9.26
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.11	< 0.005	0.03	—	0.03	0.03	—	0.03	—	161	161	0.01	< 0.005	—	161
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.12	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	348	348	0.01	0.01	0.04	352
Vendor	0.02	0.01	0.25	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	161
Hauling	0.88	0.11	8.03	5.00	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,823	4,823	0.74	0.78	0.25	5,076
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.04	21.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.32	9.32	< 0.005	< 0.005	0.01	9.76
Hauling	0.05	0.01	0.48	0.30	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	293	293	0.04	0.05	0.25	308
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.51	3.51	< 0.005	< 0.005	0.01	3.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.62
Hauling	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.5	48.5	0.01	0.01	0.04	51.0

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.78	1.49	13.4	18.4	0.03	0.08	—	0.08	0.07	—	0.07	—	2,649	2,649	0.11	0.02	—	2,659
Demolition	—	—	—	—	—	—	0.64	0.64	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.82	8.82	< 0.005	< 0.005	< 0.005	9.26
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	161	161	0.01	< 0.005	—	161
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.10	0.12	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	348	348	0.01	0.01	0.04	352
Vendor	0.02	0.01	0.25	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	161
Hauling	0.88	0.11	8.03	5.00	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,823	4,823	0.74	0.78	0.25	5,076
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.04	21.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.32	9.32	< 0.005	< 0.005	0.01	9.76
Hauling	0.05	0.01	0.48	0.30	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	293	293	0.04	0.05	0.25	308
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.51	3.51	< 0.005	< 0.005	0.01	3.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.62
Hauling	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.5	48.5	0.01	0.01	0.04	51.0

3.3. Demolition (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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.67	1.40	12.8	18.3	0.03	0.43	—	0.43	0.39	—	0.39	—	2,649	2,649	0.11	0.02	—	2,658
Demolition	—	—	—	—	—	—	0.99	0.99	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.42	0.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.1	88.1	< 0.005	< 0.005	—	88.4
Demolition	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.6
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.85	0.11	7.62	4.92	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,717	4,717	0.71	0.76	0.24	4,961
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.02	5.02	< 0.005	< 0.005	0.01	5.25
Hauling	0.03	< 0.005	0.25	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.02	0.03	0.13	165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Hauling	0.01	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.02	27.3

3.4. Demolition (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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.67	1.40	12.8	18.3	0.03	0.06	—	0.06	0.06	—	0.06	—	2,649	2,649	0.11	0.02	—	2,658
Demolition	—	—	—	—	—	—	0.64	0.64	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.42	0.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.1	88.1	< 0.005	< 0.005	—	88.4
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.6
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.85	0.11	7.62	4.92	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,717	4,717	0.71	0.76	0.24	4,961
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.02	5.02	< 0.005	< 0.005	0.01	5.25
Hauling	0.03	< 0.005	0.25	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.02	0.03	0.13	165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Hauling	0.01	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.02	27.3

3.5. Site Preparation (2025) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.81	1.52	14.7	15.1	0.02	0.63	—	0.63	0.58	—	0.58	—	2,594	2,594	0.11	0.02	—	2,603
Dust From Material Movement	—	—	—	—	—	—	8.58	8.58	—	4.27	4.27	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.80	0.83	< 0.005	0.03	—	0.03	0.03	—	0.03	—	142	142	0.01	< 0.005	—	143
Dust From Material Movement	—	—	—	—	—	—	0.47	0.47	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	4.25	0.55	38.1	24.6	0.27	0.27	5.56	5.83	0.27	1.52	1.79	—	23,587	23,587	3.56	3.78	1.21	24,804
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	—	18.7	18.7	< 0.005	< 0.005	0.03	19.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.27	8.27	< 0.005	< 0.005	0.01	8.65
Hauling	0.23	0.03	2.06	1.35	0.01	0.01	0.30	0.31	0.01	0.08	0.10	—	1,293	1,293	0.19	0.21	1.11	1,360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.10	3.10	< 0.005	< 0.005	< 0.005	3.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.43
Hauling	0.04	0.01	0.38	0.25	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	214	214	0.03	0.03	0.18	225

3.6. Site Preparation (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.81	1.52	14.7	15.1	0.02	0.09	—	0.09	0.09	—	0.09	—	2,594	2,594	0.11	0.02	—	2,603

Dust From Material Movement	—	—	—	—	—	—	3.35	3.35	—	1.66	1.66	—	—	—	—	—	—	
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.10	0.08	0.80	0.83	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	142	142	0.01	< 0.005	—	143
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.09	0.09	—	—	—	—	—	—	
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.02	0.02	0.15	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	4.25	0.55	38.1	24.6	0.27	0.27	5.56	5.83	0.27	1.52	1.79	—	23,587	23,587	3.56	3.78	1.21	24,804

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	—	18.7	18.7	< 0.005	< 0.005	0.03	19.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.27	8.27	< 0.005	< 0.005	0.01	8.65
Hauling	0.23	0.03	2.06	1.35	0.01	0.01	0.30	0.31	0.01	0.08	0.10	—	1,293	1,293	0.19	0.21	1.11	1,360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.10	3.10	< 0.005	< 0.005	< 0.005	3.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.43
Hauling	0.04	0.01	0.38	0.25	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	214	214	0.03	0.03	0.18	225

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	1.28	—	1.28	1.18	—	1.18	—	7,334	7,334	0.30	0.06	—	7,359
Dust From Material Movement	—	—	—	—	—	—	9.23	9.23	—	3.66	3.66	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.69	8.69	< 0.005	< 0.005	0.02	9.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	1.28	—	1.28	1.18	—	1.18	—	7,334	7,334	0.30	0.06	—	7,359

Dust From Material Movement	—	—	—	—	—	—	9.23	9.23	—	3.66	3.66	—	—	—	—	—	—	
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.40	0.34	2.91	2.62	0.01	0.12	—	0.12	0.11	—	0.11	—	703	703	0.03	0.01	—	706
Dust From Material Movement	—	—	—	—	—	—	0.88	0.88	—	0.35	0.35	—	—	—	—	—	—	
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.25	0.25	< 0.005	0.03	0.03	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.07	0.06	0.53	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	116	116	< 0.005	< 0.005	—	117
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.06	0.06	—	—	—	—	—	—	
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.11	0.10	0.08	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	360	360	0.01	< 0.005	1.19	362
Vendor	0.02	0.01	0.22	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.37	158
Hauling	0.26	0.03	2.18	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	2.80	1,491
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.26	0.03	2.29	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	0.07	1,488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.7	32.7	< 0.005	< 0.005	0.05	33.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.5	14.5	< 0.005	< 0.005	0.02	15.1
Hauling	0.02	< 0.005	0.22	0.14	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	136	136	0.02	0.02	0.12	143
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.42	5.42	< 0.005	< 0.005	0.01	5.50
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.51
Hauling	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.5	22.5	< 0.005	< 0.005	0.02	23.6

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	0.22	—	0.22	0.20	—	0.20	—	7,334	7,334	0.30	0.06	—	7,359
Dust From Material Movement	—	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.69	8.69	< 0.005	< 0.005	0.02	9.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	0.22	—	0.22	0.20	—	0.20	—	7,334	7,334	0.30	0.06	—	7,359
Dust From Material Movement	—	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	2.91	2.62	0.01	0.02	—	0.02	0.02	—	0.02	—	703	703	0.03	0.01	—	706
Dust From Material Movement	—	—	—	—	—	—	0.35	0.35	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.53	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	116	116	< 0.005	< 0.005	—	117
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.08	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	360	360	0.01	< 0.005	1.19	362
Vendor	0.02	0.01	0.22	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.37	158
Hauling	0.26	0.03	2.18	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	2.80	1,491

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.26	0.03	2.29	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	0.07	1,488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.7	32.7	< 0.005	< 0.005	0.05	33.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.5	14.5	< 0.005	< 0.005	0.02	15.1
Hauling	0.02	< 0.005	0.22	0.14	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	136	136	0.02	0.02	0.12	143
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.42	5.42	< 0.005	< 0.005	0.01	5.50
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.51
Hauling	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.5	22.5	< 0.005	< 0.005	0.02	23.6

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.92	3.92	< 0.005	0.39	0.39	—	13.0	13.0	< 0.005	< 0.005	0.03	13.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.92	3.92	< 0.005	0.39	0.39	—	13.0	13.0	< 0.005	< 0.005	< 0.005	13.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	6.25	7.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,436	1,436	0.06	0.01	—	1,441
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.35	2.35	< 0.005	0.23	0.23	—	7.80	7.80	< 0.005	< 0.005	0.01	8.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.14	1.43	< 0.005	0.05	—	0.05	0.04	—	0.04	—	238	238	0.01	< 0.005	—	239
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.43	0.43	< 0.005	0.04	0.04	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.35
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.15	2.62	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	703	703	0.01	0.01	2.33	707
Vendor	0.03	0.01	0.30	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.50	211
Hauling	0.28	0.04	2.42	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,573	1,573	0.24	0.25	3.11	1,657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.20	2.40	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	664	664	0.01	0.03	0.06	672
Vendor	0.03	0.01	0.31	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.01	210
Hauling	0.28	0.04	2.54	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,572	1,572	0.24	0.25	0.08	1,654
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.11	1.40	0.00	0.00	0.41	0.41	0.00	0.10	0.10	—	399	399	0.01	0.02	0.60	404
Vendor	0.02	< 0.005	0.18	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.13	126

Hauling	0.17	0.02	1.50	0.99	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	942	942	0.14	0.15	0.81	991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	0.10	67.0
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.9
Hauling	0.03	< 0.005	0.27	0.18	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.02	0.03	0.13	164

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.09	—	0.09	0.08	—	0.08	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.99	0.99	< 0.005	0.10	0.10	—	13.0	13.0	< 0.005	< 0.005	0.03	13.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.09	—	0.09	0.08	—	0.08	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.99	0.99	< 0.005	0.10	0.10	—	13.0	13.0	< 0.005	< 0.005	< 0.005	13.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	6.25	7.81	0.01	0.06	—	0.06	0.05	—	0.05	—	1,436	1,436	0.06	0.01	—	1,441
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.59	0.59	< 0.005	0.06	0.06	—	7.80	7.80	< 0.005	< 0.005	0.01	8.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.12	1.14	1.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	238	238	0.01	< 0.005	—	239
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.35
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.15	2.62	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	703	703	0.01	0.01	2.33	707
Vendor	0.03	0.01	0.30	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.50	211
Hauling	0.28	0.04	2.42	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,573	1,573	0.24	0.25	3.11	1,657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.20	2.40	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	664	664	0.01	0.03	0.06	672
Vendor	0.03	0.01	0.31	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.01	210
Hauling	0.28	0.04	2.54	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,572	1,572	0.24	0.25	0.08	1,654
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.11	1.40	0.00	0.00	0.41	0.41	0.00	0.10	0.10	—	399	399	0.01	0.02	0.60	404
Vendor	0.02	< 0.005	0.18	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.13	126
Hauling	0.17	0.02	1.50	0.99	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	942	942	0.14	0.15	0.81	991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	0.10	67.0
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.9
Hauling	0.03	< 0.005	0.27	0.18	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.02	0.03	0.13	164

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.92	3.92	< 0.005	0.39	0.39	—	12.8	12.8	< 0.005	< 0.005	< 0.005	13.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.70	2.23	< 0.005	0.07	—	0.07	0.06	—	0.06	—	413	413	0.02	< 0.005	—	414
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.68	0.68	< 0.005	0.07	0.07	—	2.21	2.21	< 0.005	< 0.005	< 0.005	2.31
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.3	68.3	< 0.005	< 0.005	—	68.6
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.18	2.22	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	650	650	0.01	0.03	0.05	659
Vendor	0.03	0.01	0.29	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	197	197	0.02	0.03	0.01	206
Hauling	0.26	0.04	2.42	1.63	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,537	1,537	0.23	0.24	0.08	1,616

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.15	114
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.0	34.0	< 0.005	< 0.005	0.03	35.6
Hauling	0.05	0.01	0.41	0.28	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	265	265	0.04	0.04	0.22	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.6	18.6	< 0.005	< 0.005	0.03	18.9
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	0.01	5.89
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.8	43.8	0.01	0.01	0.04	46.1

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.99	0.99	< 0.005	0.10	0.10	—	12.8	12.8	< 0.005	< 0.005	< 0.005	13.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.70	2.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	413	413	0.02	< 0.005	—	414
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	2.21	2.21	< 0.005	< 0.005	< 0.005	2.31
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.03	0.31	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	68.3	68.3	< 0.005	< 0.005	—	68.6
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.18	2.22	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	650	650	0.01	0.03	0.05	659
Vendor	0.03	0.01	0.29	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	197	197	0.02	0.03	0.01	206
Hauling	0.26	0.04	2.42	1.63	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,537	1,537	0.23	0.24	0.08	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.15	114
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.0	34.0	< 0.005	< 0.005	0.03	35.6
Hauling	0.05	0.01	0.41	0.28	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	265	265	0.04	0.04	0.22	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.6	18.6	< 0.005	< 0.005	0.03	18.9
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	0.01	5.89
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.8	43.8	0.01	0.01	0.04	46.1

3.13. Paving (2026) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.48	—	0.48	0.44	—	0.44	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.54	8.54	< 0.005	< 0.005	0.02	8.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.48	—	0.48	0.44	—	0.44	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.54	8.54	< 0.005	< 0.005	< 0.005	8.95
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	2.42	3.11	0.01	0.11	—	0.11	0.10	—	0.10	—	694	694	0.03	0.01	—	696
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.57	0.57	< 0.005	0.06	0.06	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.44	0.57	< 0.005	0.02	—	0.02	0.02	—	0.02	—	115	115	< 0.005	< 0.005	—	115
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.08	1.24	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	353	353	0.01	< 0.005	1.05	355
Vendor	0.02	0.01	0.21	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.35	155
Hauling	0.03	< 0.005	0.23	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.30	162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.09	1.14	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	0.01	0.01	0.03	338
Vendor	0.02	0.01	0.22	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.01	155
Hauling	0.03	< 0.005	0.24	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.3	73.3	< 0.005	< 0.005	0.10	74.4
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.4	32.4	< 0.005	< 0.005	0.03	34.0
Hauling	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.7	33.7	< 0.005	0.01	0.03	35.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.02	12.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.37	5.37	< 0.005	< 0.005	0.01	5.62
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.58	5.58	< 0.005	< 0.005	< 0.005	5.87

3.14. Paving (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.07	—	0.07	0.07	—	0.07	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.54	8.54	< 0.005	< 0.005	0.02	8.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.07	—	0.07	0.07	—	0.07	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.54	8.54	< 0.005	< 0.005	< 0.005	8.95
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	2.42	3.11	0.01	0.02	—	0.02	0.01	—	0.01	—	694	694	0.03	0.01	—	696
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.44	0.57	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	115	115	< 0.005	< 0.005	—	115
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.24	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	353	353	0.01	< 0.005	1.05	355
Vendor	0.02	0.01	0.21	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.35	155
Hauling	0.03	< 0.005	0.23	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.30	162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.09	1.14	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	0.01	0.01	0.03	338
Vendor	0.02	0.01	0.22	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.01	155
Hauling	0.03	< 0.005	0.24	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.3	73.3	< 0.005	< 0.005	0.10	74.4
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.4	32.4	< 0.005	< 0.005	0.03	34.0
Hauling	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.7	33.7	< 0.005	0.01	0.03	35.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.02	12.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.37	5.37	< 0.005	< 0.005	0.01	5.62
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.58	5.58	< 0.005	< 0.005	< 0.005	5.87

3.15. Architectural Coating (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	31.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	1.31	1.31	< 0.005	0.13	0.13	—	4.27	4.27	< 0.005	< 0.005	0.01	4.49
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Architectural Coatings	—	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.82	1.82	< 0.005	< 0.005	—	1.82
Architectural Coatings	—	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.31	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.3	88.3	< 0.005	< 0.005	0.26	88.7
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.4	49.4	< 0.005	0.01	0.12	51.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.97
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	< 0.005	4.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	31.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.33	0.33	< 0.005	0.03	0.03	—	4.27	4.27	< 0.005	< 0.005	0.01	4.49
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Architect ural Coatings	—	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.82	1.82	< 0.005	< 0.005	—	1.82
Architectural Coatings	—	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.31	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.3	88.3	< 0.005	< 0.005	0.26	88.7
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.4	49.4	< 0.005	0.01	0.12	51.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.97
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	< 0.005	4.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	171
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	171
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.51	4.51	< 0.005	< 0.005	—	4.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	32.6	32.6	0.01	< 0.005	—	32.9

4.2.2. Electricity Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	172
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	172
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	28.2	28.2	< 0.005	< 0.005	—	28.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.51	4.51	< 0.005	< 0.005	—	4.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	32.7	32.7	0.01	< 0.005	—	33.0

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Condo/T	0.00	0.00	0.00	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	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	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	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	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	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-0.41	-0.41	> -0.005	> -0.005	—	-0.41
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-0.41	-0.41	> -0.005	> -0.005	—	-0.41

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	0.38	0.36	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.8
Total	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.91	0.91	< 0.005	< 0.005	—	0.92
Consumer Products	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Total	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80

4.3.1. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.38	0.36	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.8
Total	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.91	0.91	< 0.005	< 0.005	—	0.92
Consumer Products	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.03	0.03	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Total	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

4.4.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1

4.5.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.6.2. Mitigated

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

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

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	12/1/2024	1/17/2025	5.00	35.0	—
Site Preparation	Site Preparation	1/18/2025	2/15/2025	5.00	20.0	—
Grading	Grading	2/16/2025	4/05/2025	5.00	35.0	—
Building Construction 1	Building Construction	3/1/2025	3/29/2026	5.00	280	—
Paving	Paving	3/2/2026	6/20/2026	5.00	80.0	—
Architectural Coating	Architectural Coating	5/10/2026	6/20/2026	5.00	30.0	—

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
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Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	5.00	8.00	36.0	0.38
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	5.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Building Construction 1	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction 1	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction 1	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction 1	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction 1	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	3.00	8.00	81.0	0.42
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Graders	Diesel	Average	1.00	1.00	148	0.41
Paving	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Paving	Scrapers	Diesel	Average	1.00	1.00	423	0.48
Paving	Plate Compactors	Diesel	Average	1.00	1.00	8.00	0.43

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
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5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	5.00	8.00	36.0	0.38
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	5.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Building Construction 1	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction 1	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction 1	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction 1	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction 1	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	3.00	8.00	81.0	0.42
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Paving	Graders	Diesel	Average	1.00	1.00	148	0.41
Paving	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Paving	Scrapers	Diesel	Average	1.00	1.00	423	0.48
Paving	Plate Compactors	Diesel	Average	1.00	1.00	8.00	0.43
Architectural Coating	Air Compressors	Diesel	Average	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	40.0	12.8	LDA,LDT1,LDT2
Demolition	Vendor	6.00	7.30	HHDT,MHDT
Demolition	Hauling	60.0	20.0	HHDT
Demolition	Onsite truck	2.00	1.00	HHDT,MHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	40.0	12.8	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	7.30	HHDT,MHDT
Site Preparation	Hauling	300	20.0	HHDT
Site Preparation	Onsite truck	2.00	1.00	HHDT,MHDT
Grading	—	—	—	—
Grading	Worker	40.0	12.8	LDA,LDT1,LDT2
Grading	Vendor	6.00	7.30	HHDT,MHDT
Grading	Hauling	18.0	20.0	HHDT
Grading	Onsite truck	2.00	1.00	HHDT,MHDT
Building Construction 1	—	—	—	—
Building Construction 1	Worker	78.0	12.8	LDA,LDT1,LDT2

Building Construction 1	Vendor	8.00	7.30	HHDT,MHDT
Building Construction 1	Hauling	20.0	20.0	HHDT
Building Construction 1	Onsite truck	3.00	1.00	HHDT,MHDT
Paving	—	—	—	—
Paving	Worker	40.0	12.8	LDA,LDT1,LDT2
Paving	Vendor	6.00	7.30	HHDT,MHDT
Paving	Hauling	2.00	20.0	HHDT
Paving	Onsite truck	2.00	1.00	HHDT,MHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	12.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.30	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	1.00	1.00	HHDT,MHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	40.0	12.8	LDA,LDT1,LDT2
Demolition	Vendor	6.00	7.30	HHDT,MHDT
Demolition	Hauling	60.0	20.0	HHDT
Demolition	Onsite truck	2.00	1.00	HHDT,MHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	40.0	12.8	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	7.30	HHDT,MHDT
Site Preparation	Hauling	300	20.0	HHDT
Site Preparation	Onsite truck	2.00	1.00	HHDT,MHDT
Grading	—	—	—	—

Grading	Worker	40.0	12.8	LDA,LDT1,LDT2
Grading	Vendor	6.00	7.30	HHDT,MHDT
Grading	Hauling	18.0	20.0	HHDT
Grading	Onsite truck	2.00	1.00	HHDT,MHDT
Building Construction 1	—	—	—	—
Building Construction 1	Worker	78.0	12.8	LDA,LDT1,LDT2
Building Construction 1	Vendor	8.00	7.30	HHDT,MHDT
Building Construction 1	Hauling	20.0	20.0	HHDT
Building Construction 1	Onsite truck	3.00	1.00	HHDT,MHDT
Paving	—	—	—	—
Paving	Worker	40.0	12.8	LDA,LDT1,LDT2
Paving	Vendor	6.00	7.30	HHDT,MHDT
Paving	Hauling	2.00	20.0	HHDT
Paving	Onsite truck	2.00	1.00	HHDT,MHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	12.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.30	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	1.00	1.00	HHDT,MHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
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Architectural Coating	135,144	45,048	0.00	0.00	3,340
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5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,500	—
Site Preparation	66,738	0.00	15.0	0.00	—
Grading	7,500	0.00	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.28

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Parking Lot	1.28	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005
2026	0.00	204	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
Condo/Townhouse	520	578	446	188,883	7,753	8,622	6,652	2,817,745
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
Condo/Townhouse	520	578	446	188,883	7,753	8,622	6,652	2,817,745
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

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	36
No Fireplaces	35
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0
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5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	36
No Fireplaces	35
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
135144.44999999998	45,048	0.00	0.00	3,340

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)
Condo/Townhouse	303,489	204	0.0330	0.0040	0.00
Parking Lot	48,767	204	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	304,499	204	0.0330	0.0040	-7,716
Parking Lot	48,767	204	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)
Condo/Townhouse	2,574,914	6.59
Parking Lot	0.00	1.08

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
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Condo/Townhouse	2,574,914	6.59
Parking Lot	0.00	1.08

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	54.7	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	54.7	—
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
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	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
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Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	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
—	—

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	8.54	annual days of extreme heat
Extreme Precipitation	6.90	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	14.3	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	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.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
-----------	---------------------------------

Exposure Indicators	—
AQ-Ozone	7.52
AQ-PM	14.5
AQ-DPM	30.0
Drinking Water	48.2
Lead Risk Housing	23.7
Pesticides	82.8
Toxic Releases	28.0
Traffic	21.1
Effect Indicators	—
CleanUp Sites	46.1
Groundwater	30.9
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	38.6
Cardio-vascular	20.9
Low Birth Weights	60.1
Socioeconomic Factor Indicators	—
Education	14.8
Housing	42.3
Linguistic	0.00
Poverty	6.73
Unemployment	1.15

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	91.03041191
Employed	89.79853715
Median HI	83.63916335
Education	—
Bachelor's or higher	78.91697677
High school enrollment	100
Preschool enrollment	88.41267804
Transportation	—
Auto Access	43.87270627
Active commuting	72.95008341
Social	—
2-parent households	52.82946234
Voting	91.50519697
Neighborhood	—
Alcohol availability	59.74592583
Park access	35.26241499
Retail density	11.88245862
Supermarket access	2.399589375
Tree canopy	93.41716925
Housing	—
Homeownership	81.12408572
Housing habitability	44.70678814
Low-inc homeowner severe housing cost burden	43.85987425
Low-inc renter severe housing cost burden	88.29718979
Uncrowded housing	33.18362633

Health Outcomes	—
Insured adults	88.86179905
Arthritis	0.0
Asthma ER Admissions	65.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	54.6
Cognitively Disabled	26.7
Physically Disabled	29.8
Heart Attack ER Admissions	91.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	68.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	7.9
SLR Inundation Area	31.3

Children	71.1
Elderly	28.7
English Speaking	74.8
Foreign-born	17.8
Outdoor Workers	33.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.3
Traffic Density	2.3
Traffic Access	23.0
Other Indices	—
Hardship	23.7
Other Decision Support	—
2016 Voting	92.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	11.0
Healthy Places Index Score for Project Location (b)	90.0
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	Updated acreages 4/2023
Construction: Trips and VMT	Added onsite travel with mixed vehicles
Construction: Construction Phases	Approximately 18 month construction duration
Construction: Dust From Material Movement	Site Prep Building materials would be transported to the site Grading import approximately 7,500 cubic yards of fill
Operations: Energy Use	No natural gas
Operations: Hearths	No natural gas
Construction: Off-Road Equipment	Modified with Midpen inputs
Construction: Demolition	20,840 CY of site concrete to demo accounted for in haul trips

Cypress Point Affordable House Project Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Cypress Point Affordable House Project
Construction Start Date	12/1/2024
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.60
Precipitation (days)	41.0
Location	37.53401472727023, -122.51597955266524
County	San Mateo
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1226
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.13

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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Condo/Townhouse	71.0	Dwelling Unit	5.00	66,738	0.65	0.00	213	—
Parking Lot	142	Space	1.28	0.00	0.13	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Transportation	T-4	Integrate Affordable and Below Market Rate Housing
Energy	E-12-B	Install Electric Space Heater in Place of Natural Gas Heaters in Residences

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.45	33.5	46.2	47.8	0.13	1.75	17.6	19.4	1.61	4.78	6.39	—	14,156	14,156	0.90	0.62	10.4	14,374
Mit.	2.33	32.5	35.1	59.8	0.13	0.36	7.11	7.46	0.34	2.06	2.40	—	14,156	14,156	0.90	0.62	10.4	14,374
% Reduced	64%	3%	24%	-25%	—	80%	60%	61%	79%	57%	62%	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.45	5.01	53.1	47.4	0.30	1.75	17.6	19.4	1.61	6.15	7.00	—	26,680	26,680	3.69	3.84	1.26	27,918
Mit.	4.71	1.73	46.2	59.5	0.30	0.36	9.97	10.3	0.35	3.35	3.67	—	26,680	26,680	3.69	3.84	1.26	27,918
% Reduced	27%	66%	13%	-25%	—	80%	43%	47%	79%	46%	48%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	3.18	14.8	16.3	0.05	0.46	5.31	5.77	0.43	1.15	1.58	—	5,515	5,515	0.50	0.47	3.03	5,670
Mit.	1.01	2.85	13.0	18.3	0.05	0.13	2.36	2.49	0.13	0.58	0.71	—	5,515	5,515	0.50	0.47	3.03	5,670
% Reduced	49%	10%	12%	-12%	—	71%	56%	57%	70%	49%	55%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	0.58	2.70	2.97	0.01	0.08	0.97	1.05	0.08	0.21	0.29	—	913	913	0.08	0.08	0.50	939
Mit.	0.18	0.52	2.37	3.34	0.01	0.02	0.43	0.45	0.02	0.11	0.13	—	913	913	0.08	0.08	0.50	939
% Reduced	49%	10%	12%	-12%	—	71%	56%	57%	70%	49%	55%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	6.45	5.01	46.2	47.8	0.13	1.75	17.6	19.4	1.61	4.78	6.39	—	14,156	14,156	0.90	0.62	10.4	14,374
2026	1.96	33.5	12.5	17.3	0.03	0.51	4.46	4.97	0.47	0.52	0.99	—	4,104	4,104	0.18	0.08	2.10	4,136
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	2.80	1.71	21.8	24.9	0.08	0.57	5.12	5.69	0.53	0.81	1.34	—	7,983	7,983	0.87	0.84	0.29	8,257
2025	6.45	5.01	53.1	47.4	0.30	1.75	17.6	19.4	1.61	6.15	7.00	—	26,680	26,680	3.69	3.84	1.26	27,918
2026	3.56	2.80	24.4	32.7	0.07	0.88	8.10	8.98	0.82	1.04	1.86	—	8,605	8,605	0.53	0.41	0.19	8,739
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.17	0.10	1.32	1.50	< 0.005	0.03	0.31	0.34	0.03	0.05	0.08	—	484	484	0.05	0.05	0.29	501
2025	1.99	1.34	14.8	16.3	0.05	0.46	5.31	5.77	0.43	1.15	1.58	—	5,515	5,515	0.50	0.47	3.03	5,670
2026	0.71	3.18	4.82	6.46	0.01	0.18	1.65	1.82	0.16	0.21	0.37	—	1,684	1,684	0.10	0.08	0.58	1,709
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.03	0.02	0.24	0.27	< 0.005	0.01	0.06	0.06	0.01	0.01	0.01	—	80.2	80.2	0.01	0.01	0.05	83.0
2025	0.36	0.24	2.70	2.97	0.01	0.08	0.97	1.05	0.08	0.21	0.29	—	913	913	0.08	0.08	0.50	939
2026	0.13	0.58	0.88	1.18	< 0.005	0.03	0.30	0.33	0.03	0.04	0.07	—	279	279	0.02	0.01	0.10	283

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.33	1.73	35.1	59.8	0.13	0.36	7.11	7.46	0.34	2.06	2.40	—	14,156	14,156	0.90	0.62	10.4	14,374
2026	0.63	32.5	13.1	21.8	0.03	0.15	1.53	1.68	0.15	0.23	0.38	—	4,104	4,104	0.18	0.08	2.10	4,136
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.43	0.63	23.7	25.1	0.08	0.35	2.81	3.16	0.33	0.56	0.89	—	7,983	7,983	0.87	0.84	0.29	8,257
2025	4.71	1.73	46.2	59.5	0.30	0.36	9.97	10.3	0.35	3.35	3.67	—	26,680	26,680	3.69	3.84	1.26	27,918
2026	1.51	1.20	24.4	39.2	0.07	0.26	3.21	3.47	0.25	0.55	0.80	—	8,605	8,605	0.53	0.41	0.19	8,739
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	0.09	0.04	1.43	1.52	< 0.005	0.02	0.17	0.19	0.02	0.03	0.05	—	484	484	0.05	0.05	0.29	501
2025	1.01	0.56	13.0	18.3	0.05	0.13	2.36	2.49	0.13	0.58	0.71	—	5,515	5,515	0.50	0.47	3.03	5,670
2026	0.29	2.85	4.86	7.80	0.01	0.05	0.63	0.69	0.05	0.11	0.16	—	1,684	1,684	0.10	0.08	0.58	1,709
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.02	0.01	0.26	0.28	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	80.2	80.2	0.01	0.01	0.05	83.0
2025	0.18	0.10	2.37	3.34	0.01	0.02	0.43	0.45	0.02	0.11	0.13	—	913	913	0.08	0.08	0.50	939
2026	0.05	0.52	0.89	1.42	< 0.005	0.01	0.12	0.13	0.01	0.02	0.03	—	279	279	0.02	0.01	0.10	283

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,860	6,894	3.71	0.21	20.1	7,070
Mit.	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,858	6,892	3.71	0.21	20.1	7,068
% Reduced	—	—	< 0.5%	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.96	3.44	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,562	6,596	3.72	0.23	0.99	6,759
Mit.	1.96	3.44	1.88	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,560	6,594	3.72	0.23	0.99	6,757
% Reduced	—	—	< 0.5%	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,723	5,757	3.66	0.20	8.07	5,915
Mit.	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,721	5,755	3.66	0.20	8.07	5,914

% Reduced	—	—	< 0.5%	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979
Mit.	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979
% Reduced	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	1%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	> -0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Area	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	197	197	0.03	< 0.005	—	199
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,860	6,894	3.71	0.21	20.1	7,070
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Area	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	197	197	0.03	< 0.005	—	199
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.96	3.44	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,562	6,596	3.72	0.23	0.99	6,759
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.73	1.54	1.59	16.9	0.05	0.03	2.11	2.14	0.03	0.37	0.40	—	5,506	5,506	0.18	0.18	7.59	5,572
Area	0.19	1.87	0.02	1.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	10.8	10.8	< 0.005	< 0.005	—	10.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	197	197	0.03	< 0.005	—	199
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,723	5,757	3.66	0.20	8.07	5,915
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Area	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	32.6	32.6	0.01	< 0.005	—	32.9
Water	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06
Waste	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Area	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235

Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	195	195	0.03	< 0.005	—	197
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	2.36	3.83	1.64	24.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,858	6,892	3.71	0.21	20.1	7,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Area	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	195	195	0.03	< 0.005	—	197
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.96	3.44	1.88	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	34.4	6,560	6,594	3.72	0.23	0.99	6,757
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.73	1.54	1.59	16.9	0.05	0.03	2.11	2.14	0.03	0.37	0.40	—	5,506	5,506	0.18	0.18	7.59	5,572
Area	0.19	1.87	0.02	1.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	10.8	10.8	< 0.005	< 0.005	—	10.9
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	195	195	0.03	< 0.005	—	197
Water	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Waste	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	1.92	3.41	1.61	18.8	0.05	0.03	2.11	2.14	0.03	0.37	0.40	34.4	5,721	5,755	3.66	0.20	8.07	5,914
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Area	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80
Energy	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	32.3	32.3	0.01	< 0.005	—	32.6
Water	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

Waste	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	0.35	0.62	0.29	3.44	0.01	0.01	0.38	0.39	0.01	0.07	0.07	5.70	947	953	0.61	0.03	1.34	979

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.78	1.49	13.4	18.4	0.03	0.51	—	0.51	0.47	—	0.47	—	2,649	2,649	0.11	0.02	—	2,659
Demolition	—	—	—	—	—	—	0.99	0.99	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.82	8.82	< 0.005	< 0.005	< 0.005	9.26
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.11	< 0.005	0.03	—	0.03	0.03	—	0.03	—	161	161	0.01	< 0.005	—	161
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.12	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	348	348	0.01	0.01	0.04	352
Vendor	0.02	0.01	0.25	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	161
Hauling	0.88	0.11	8.03	5.00	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,823	4,823	0.74	0.78	0.25	5,076
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.04	21.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.32	9.32	< 0.005	< 0.005	0.01	9.76
Hauling	0.05	0.01	0.48	0.30	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	293	293	0.04	0.05	0.25	308
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.51	3.51	< 0.005	< 0.005	0.01	3.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.62
Hauling	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.5	48.5	0.01	0.01	0.04	51.0

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.40	15.2	18.6	0.03	0.29	—	0.29	0.27	—	0.27	—	2,649	2,649	0.11	0.02	—	2,659
Demolition	—	—	—	—	—	—	0.64	0.64	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.82	8.82	< 0.005	< 0.005	< 0.005	9.26
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.93	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	161	161	0.01	< 0.005	—	161
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.17	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.10	0.12	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	348	348	0.01	0.01	0.04	352
Vendor	0.02	0.01	0.25	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	161
Hauling	0.88	0.11	8.03	5.00	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,823	4,823	0.74	0.78	0.25	5,076
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.04	21.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.32	9.32	< 0.005	< 0.005	0.01	9.76
Hauling	0.05	0.01	0.48	0.30	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	293	293	0.04	0.05	0.25	308
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.51	3.51	< 0.005	< 0.005	0.01	3.56
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.62
Hauling	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.5	48.5	0.01	0.01	0.04	51.0

3.3. Demolition (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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.67	1.40	12.8	18.3	0.03	0.43	—	0.43	0.39	—	0.39	—	2,649	2,649	0.11	0.02	—	2,658
Demolition	—	—	—	—	—	—	0.99	0.99	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.42	0.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.1	88.1	< 0.005	< 0.005	—	88.4
Demolition	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.6
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.85	0.11	7.62	4.92	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,717	4,717	0.71	0.76	0.24	4,961
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.02	5.02	< 0.005	< 0.005	0.01	5.25
Hauling	0.03	< 0.005	0.25	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.02	0.03	0.13	165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Hauling	0.01	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.02	27.3

3.4. Demolition (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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.40	15.2	18.6	0.03	0.29	—	0.29	0.27	—	0.27	—	2,649	2,649	0.11	0.02	—	2,658
Demolition	—	—	—	—	—	—	0.64	0.64	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.51	0.62	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.1	88.1	< 0.005	< 0.005	—	88.4
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.6
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.85	0.11	7.62	4.92	0.05	0.05	1.11	1.17	0.05	0.30	0.36	—	4,717	4,717	0.71	0.76	0.24	4,961
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.02	5.02	< 0.005	< 0.005	0.01	5.25
Hauling	0.03	< 0.005	0.25	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.02	0.03	0.13	165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Hauling	0.01	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.02	27.3

3.5. Site Preparation (2025) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.81	1.52	14.7	15.1	0.02	0.63	—	0.63	0.58	—	0.58	—	2,594	2,594	0.11	0.02	—	2,603
Dust From Material Movement	—	—	—	—	—	—	8.58	8.58	—	4.27	4.27	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.80	0.83	< 0.005	0.03	—	0.03	0.03	—	0.03	—	142	142	0.01	< 0.005	—	143
Dust From Material Movement	—	—	—	—	—	—	0.47	0.47	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	4.25	0.55	38.1	24.6	0.27	0.27	5.56	5.83	0.27	1.52	1.79	—	23,587	23,587	3.56	3.78	1.21	24,804
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	—	18.7	18.7	< 0.005	< 0.005	0.03	19.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.27	8.27	< 0.005	< 0.005	0.01	8.65
Hauling	0.23	0.03	2.06	1.35	0.01	0.01	0.30	0.31	0.01	0.08	0.10	—	1,293	1,293	0.19	0.21	1.11	1,360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.10	3.10	< 0.005	< 0.005	< 0.005	3.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.43
Hauling	0.04	0.01	0.38	0.25	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	214	214	0.03	0.03	0.18	225

3.6. Site Preparation (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.33	7.71	14.5	0.02	0.05	—	0.05	0.05	—	0.05	—	2,594	2,594	0.11	0.02	—	2,603

Dust From Material Movement	—	—	—	—	—	—	3.35	3.35	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.42	0.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	142	142	0.01	< 0.005	—	143
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.08	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	4.25	0.55	38.1	24.6	0.27	0.27	5.56	5.83	0.27	1.52	1.79	—	23,587	23,587	3.56	3.78	1.21	24,804

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	—	18.7	18.7	< 0.005	< 0.005	0.03	19.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.27	8.27	< 0.005	< 0.005	0.01	8.65
Hauling	0.23	0.03	2.06	1.35	0.01	0.01	0.30	0.31	0.01	0.08	0.10	—	1,293	1,293	0.19	0.21	1.11	1,360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.10	3.10	< 0.005	< 0.005	< 0.005	3.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.43
Hauling	0.04	0.01	0.38	0.25	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	214	214	0.03	0.03	0.18	225

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	1.28	—	1.28	1.18	—	1.18	—	7,334	7,334	0.30	0.06	—	7,359
Dust From Material Movement	—	—	—	—	—	—	9.23	9.23	—	3.66	3.66	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.69	8.69	< 0.005	< 0.005	0.02	9.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.18	3.51	30.4	27.3	0.07	1.28	—	1.28	1.18	—	1.18	—	7,334	7,334	0.30	0.06	—	7,359

Dust From Material Movement	—	—	—	—	—	—	9.23	9.23	—	3.66	3.66	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	2.91	2.62	0.01	0.12	—	0.12	0.11	—	0.11	—	703	703	0.03	0.01	—	706
Dust From Material Movement	—	—	—	—	—	—	0.88	0.88	—	0.35	0.35	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.25	0.25	< 0.005	0.03	0.03	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.53	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	116	116	< 0.005	< 0.005	—	117
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.08	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	360	360	0.01	< 0.005	1.19	362
Vendor	0.02	0.01	0.22	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.37	158
Hauling	0.26	0.03	2.18	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	2.80	1,491
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.26	0.03	2.29	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	0.07	1,488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.7	32.7	< 0.005	< 0.005	0.05	33.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.5	14.5	< 0.005	< 0.005	0.02	15.1
Hauling	0.02	< 0.005	0.22	0.14	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	136	136	0.02	0.02	0.12	143
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.42	5.42	< 0.005	< 0.005	0.01	5.50
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.51
Hauling	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.5	22.5	< 0.005	< 0.005	0.02	23.6

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.94	20.2	37.5	0.07	0.20	—	0.20	0.19	—	0.19	—	7,334	7,334	0.30	0.06	—	7,359
Dust From Material Movement	—	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.69	8.69	< 0.005	< 0.005	0.02	9.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.96	0.94	20.2	37.5	0.07	0.20	—	0.20	0.19	—	0.19	—	7,334	7,334	0.30	0.06	—	7,359
Dust From Material Movement	—	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.68	8.68	< 0.005	< 0.005	< 0.005	9.10
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	1.94	3.60	0.01	0.02	—	0.02	0.02	—	0.02	—	703	703	0.03	0.01	—	706
Dust From Material Movement	—	—	—	—	—	—	0.35	0.35	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.35	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	116	116	< 0.005	< 0.005	—	117
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.08	1.34	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	360	360	0.01	< 0.005	1.19	362
Vendor	0.02	0.01	0.22	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.37	158
Hauling	0.26	0.03	2.18	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	2.80	1,491

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.23	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	340	340	0.01	0.01	0.03	345
Vendor	0.02	0.01	0.23	0.14	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.02	0.02	0.01	158
Hauling	0.26	0.03	2.29	1.48	0.02	0.02	0.33	0.35	0.02	0.09	0.11	—	1,415	1,415	0.21	0.23	0.07	1,488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.7	32.7	< 0.005	< 0.005	0.05	33.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.5	14.5	< 0.005	< 0.005	0.02	15.1
Hauling	0.02	< 0.005	0.22	0.14	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	136	136	0.02	0.02	0.12	143
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.42	5.42	< 0.005	< 0.005	0.01	5.50
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.40	2.40	< 0.005	< 0.005	< 0.005	2.51
Hauling	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.5	22.5	< 0.005	< 0.005	0.02	23.6

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.92	3.92	< 0.005	0.39	0.39	—	13.0	13.0	< 0.005	< 0.005	0.03	13.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.92	3.92	< 0.005	0.39	0.39	—	13.0	13.0	< 0.005	< 0.005	< 0.005	13.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	6.25	7.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,436	1,436	0.06	0.01	—	1,441
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.35	2.35	< 0.005	0.23	0.23	—	7.80	7.80	< 0.005	< 0.005	0.01	8.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.14	1.43	< 0.005	0.05	—	0.05	0.04	—	0.04	—	238	238	0.01	< 0.005	—	239
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.43	0.43	< 0.005	0.04	0.04	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.35
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.15	2.62	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	703	703	0.01	0.01	2.33	707
Vendor	0.03	0.01	0.30	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.50	211
Hauling	0.28	0.04	2.42	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,573	1,573	0.24	0.25	3.11	1,657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.20	2.40	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	664	664	0.01	0.03	0.06	672
Vendor	0.03	0.01	0.31	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.01	210
Hauling	0.28	0.04	2.54	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,572	1,572	0.24	0.25	0.08	1,654
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.11	1.40	0.00	0.00	0.41	0.41	0.00	0.10	0.10	—	399	399	0.01	0.02	0.60	404
Vendor	0.02	< 0.005	0.18	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.13	126

Hauling	0.17	0.02	1.50	0.99	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	942	942	0.14	0.15	0.81	991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	0.10	67.0
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.9
Hauling	0.03	< 0.005	0.27	0.18	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.02	0.03	0.13	164

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.42	9.53	14.8	0.02	0.12	—	0.12	0.11	—	0.11	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.99	0.99	< 0.005	0.10	0.10	—	13.0	13.0	< 0.005	< 0.005	0.03	13.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.42	9.53	14.8	0.02	0.12	—	0.12	0.11	—	0.11	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.99	0.99	< 0.005	0.10	0.10	—	13.0	13.0	< 0.005	< 0.005	< 0.005	13.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.25	5.71	8.88	0.01	0.07	—	0.07	0.07	—	0.07	—	1,436	1,436	0.06	0.01	—	1,441
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.59	0.59	< 0.005	0.06	0.06	—	7.80	7.80	< 0.005	< 0.005	0.01	8.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.05	1.04	1.62	< 0.005	0.01	—	0.01	0.01	—	0.01	—	238	238	0.01	< 0.005	—	239
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.35
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.15	2.62	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	703	703	0.01	0.01	2.33	707
Vendor	0.03	0.01	0.30	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.50	211
Hauling	0.28	0.04	2.42	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,573	1,573	0.24	0.25	3.11	1,657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.20	2.40	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	664	664	0.01	0.03	0.06	672
Vendor	0.03	0.01	0.31	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	201	201	0.02	0.03	0.01	210
Hauling	0.28	0.04	2.54	1.64	0.02	0.02	0.37	0.39	0.02	0.10	0.12	—	1,572	1,572	0.24	0.25	0.08	1,654
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.11	1.40	0.00	0.00	0.41	0.41	0.00	0.10	0.10	—	399	399	0.01	0.02	0.60	404
Vendor	0.02	< 0.005	0.18	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.13	126
Hauling	0.17	0.02	1.50	0.99	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	942	942	0.14	0.15	0.81	991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	0.10	67.0
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.9
Hauling	0.03	< 0.005	0.27	0.18	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.02	0.03	0.13	164

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	3.92	3.92	< 0.005	0.39	0.39	—	12.8	12.8	< 0.005	< 0.005	< 0.005	13.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.70	2.23	< 0.005	0.07	—	0.07	0.06	—	0.06	—	413	413	0.02	< 0.005	—	414
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.68	0.68	< 0.005	0.07	0.07	—	2.21	2.21	< 0.005	< 0.005	< 0.005	2.31
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.3	68.3	< 0.005	< 0.005	—	68.6
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.18	2.22	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	650	650	0.01	0.03	0.05	659
Vendor	0.03	0.01	0.29	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	197	197	0.02	0.03	0.01	206
Hauling	0.26	0.04	2.42	1.63	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,537	1,537	0.23	0.24	0.08	1,616

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.15	114
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.0	34.0	< 0.005	< 0.005	0.03	35.6
Hauling	0.05	0.01	0.41	0.28	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	265	265	0.04	0.04	0.22	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.6	18.6	< 0.005	< 0.005	0.03	18.9
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	0.01	5.89
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.8	43.8	0.01	0.01	0.04	46.1

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.41	9.53	14.8	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	0.99	0.99	< 0.005	0.10	0.10	—	12.8	12.8	< 0.005	< 0.005	< 0.005	13.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	1.64	2.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	413	413	0.02	< 0.005	—	414
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	2.21	2.21	< 0.005	< 0.005	< 0.005	2.31
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.30	0.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	68.3	68.3	< 0.005	< 0.005	—	68.6
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.18	2.22	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	650	650	0.01	0.03	0.05	659
Vendor	0.03	0.01	0.29	0.18	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	197	197	0.02	0.03	0.01	206
Hauling	0.26	0.04	2.42	1.63	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,537	1,537	0.23	0.24	0.08	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.15	114
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.0	34.0	< 0.005	< 0.005	0.03	35.6
Hauling	0.05	0.01	0.41	0.28	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	265	265	0.04	0.04	0.22	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.6	18.6	< 0.005	< 0.005	0.03	18.9
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	0.01	5.89
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.8	43.8	0.01	0.01	0.04	46.1

3.13. Paving (2026) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.48	—	0.48	0.44	—	0.44	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.54	8.54	< 0.005	< 0.005	0.02	8.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	11.0	14.2	0.03	0.48	—	0.48	0.44	—	0.44	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	8.54	8.54	< 0.005	< 0.005	< 0.005	8.95
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	2.42	3.11	0.01	0.11	—	0.11	0.10	—	0.10	—	694	694	0.03	0.01	—	696
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.57	0.57	< 0.005	0.06	0.06	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.44	0.57	< 0.005	0.02	—	0.02	0.02	—	0.02	—	115	115	< 0.005	< 0.005	—	115
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.08	1.24	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	353	353	0.01	< 0.005	1.05	355
Vendor	0.02	0.01	0.21	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.35	155
Hauling	0.03	< 0.005	0.23	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.30	162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.09	1.14	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	0.01	0.01	0.03	338
Vendor	0.02	0.01	0.22	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.01	155
Hauling	0.03	< 0.005	0.24	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.3	73.3	< 0.005	< 0.005	0.10	74.4
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.4	32.4	< 0.005	< 0.005	0.03	34.0
Hauling	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.7	33.7	< 0.005	0.01	0.03	35.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.02	12.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.37	5.37	< 0.005	< 0.005	0.01	5.62
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.58	5.58	< 0.005	< 0.005	< 0.005	5.87

3.14. Paving (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.42	11.4	18.9	0.03	0.12	—	0.12	0.11	—	0.11	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.54	8.54	< 0.005	< 0.005	0.02	8.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.42	11.4	18.9	0.03	0.12	—	0.12	0.11	—	0.11	—	3,166	3,166	0.13	0.03	—	3,176
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.66	0.66	< 0.005	0.07	0.07	—	8.54	8.54	< 0.005	< 0.005	< 0.005	8.95
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.50	4.14	0.01	0.03	—	0.03	0.02	—	0.02	—	694	694	0.03	0.01	—	696
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.46	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	115	115	< 0.005	< 0.005	—	115
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.24	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	353	353	0.01	< 0.005	1.05	355
Vendor	0.02	0.01	0.21	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.35	155
Hauling	0.03	< 0.005	0.23	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.30	162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.09	1.14	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	334	334	0.01	0.01	0.03	338
Vendor	0.02	0.01	0.22	0.13	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	148	148	0.01	0.02	0.01	155
Hauling	0.03	< 0.005	0.24	0.16	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	154	154	0.02	0.02	0.01	162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.3	73.3	< 0.005	< 0.005	0.10	74.4
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.4	32.4	< 0.005	< 0.005	0.03	34.0
Hauling	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.7	33.7	< 0.005	0.01	0.03	35.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.02	12.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.37	5.37	< 0.005	< 0.005	0.01	5.62
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.58	5.58	< 0.005	< 0.005	< 0.005	5.87

3.15. Architectural Coating (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	31.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	1.31	1.31	< 0.005	0.13	0.13	—	4.27	4.27	< 0.005	< 0.005	0.01	4.49
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Architectural Coatings	—	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	0.11	< 0.005	0.01	0.01	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.82	1.82	< 0.005	< 0.005	—	1.82
Architectural Coatings	—	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.31	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.3	88.3	< 0.005	< 0.005	0.26	88.7
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.4	49.4	< 0.005	0.01	0.12	51.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.97
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	< 0.005	4.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	1.07	0.96	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	31.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.33	0.33	< 0.005	0.03	0.03	—	4.27	4.27	< 0.005	< 0.005	0.01	4.49
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Architectural Coatings	—	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.82	1.82	< 0.005	< 0.005	—	1.82
Architectural Coatings	—	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.31	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.3	88.3	< 0.005	< 0.005	0.26	88.7
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.4	49.4	< 0.005	0.01	0.12	51.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.97
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.06	4.06	< 0.005	< 0.005	< 0.005	4.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.98	1.78	1.60	20.6	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,421	6,421	0.19	0.19	19.6	6,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.96	1.75	1.89	19.3	0.06	0.03	2.35	2.39	0.03	0.41	0.44	—	6,133	6,133	0.20	0.21	0.51	6,201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.28	0.29	3.08	0.01	0.01	0.38	0.39	0.01	0.07	0.07	—	912	912	0.03	0.03	1.26	922

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	171
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	171
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.51	4.51	< 0.005	< 0.005	—	4.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	32.6	32.6	0.01	< 0.005	—	32.9

4.2.2. Electricity Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	172
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.03	< 0.005	—	172
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.03	< 0.005	—	199
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	28.2	28.2	< 0.005	< 0.005	—	28.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.51	4.51	< 0.005	< 0.005	—	4.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	32.7	32.7	0.01	< 0.005	—	33.0

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Condo/T	0.00	0.00	0.00	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	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	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	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	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	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-2.47	-2.47	> -0.005	> -0.005	—	-2.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-0.41	-0.41	> -0.005	> -0.005	—	-0.41
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	> -0.005	> -0.005	—	> -0.005	—	-0.41	-0.41	> -0.005	> -0.005	—	-0.41

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	0.38	0.36	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.8
Total	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.91	0.91	< 0.005	< 0.005	—	0.92
Consumer Products	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Total	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80

4.3.1. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.38	0.36	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.8
Total	0.38	2.05	0.04	4.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	233	233	0.04	< 0.005	—	235
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Consumer Products	—	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	1.69	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	222	222	0.04	< 0.005	—	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.91	0.91	< 0.005	< 0.005	—	0.92
Consumer Products	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.03	0.03	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	—	0.88
Total	0.03	0.34	< 0.005	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.79	1.79	< 0.005	< 0.005	—	1.80

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

4.4.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	4.93	9.32	14.3	0.51	0.01	—	30.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	0.82	1.54	2.36	0.08	< 0.005	—	5.06

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1

4.5.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.5	0.00	29.5	2.95	0.00	—	103
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.88	0.00	4.88	0.49	0.00	—	17.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.6.2. Mitigated

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

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

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Daily, Summer (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Daily, Winter (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Annual	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	12/1/2024	1/17/2025	5.00	35.0	—
Site Preparation	Site Preparation	1/18/2025	2/15/2025	5.00	20.0	—
Grading	Grading	2/16/2025	4/05/2025	5.00	35.0	—
Building Construction 1	Building Construction	3/1/2025	3/29/2026	5.00	280	—
Paving	Paving	3/2/2026	6/20/2026	5.00	80.0	—
Architectural Coating	Architectural Coating	5/10/2026	6/20/2026	5.00	30.0	—

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
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Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	5.00	8.00	36.0	0.38
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	5.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Building Construction 1	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction 1	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction 1	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction 1	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction 1	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	3.00	8.00	81.0	0.42
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Graders	Diesel	Average	1.00	1.00	148	0.41
Paving	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Paving	Scrapers	Diesel	Average	1.00	1.00	423	0.48
Paving	Plate Compactors	Diesel	Average	1.00	1.00	8.00	0.43

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
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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 Interim	2.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Interim	5.00	8.00	36.0	0.38
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	5.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	2.00	5.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	8.00	84.0	0.37
Grading	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Grading	Graders	Diesel	Tier 4 Interim	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Interim	2.00	8.00	423	0.48
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Off-Highway Trucks	Diesel	Tier 4 Interim	1.00	8.00	376	0.38
Grading	Sweepers/Scrubbers	Diesel	Tier 4 Interim	1.00	8.00	36.0	0.46
Building Construction 1	Cranes	Diesel	Tier 4 Interim	1.00	7.00	367	0.29
Building Construction 1	Forklifts	Diesel	Tier 4 Interim	3.00	8.00	82.0	0.20
Building Construction 1	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction 1	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	7.00	84.0	0.37
Building Construction 1	Welders	Diesel	Tier 4 Interim	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Interim	3.00	8.00	81.0	0.42
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	8.00	84.0	0.37
Paving	Rollers	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38

Paving	Graders	Diesel	Tier 4 Interim	1.00	1.00	148	0.41
Paving	Off-Highway Trucks	Diesel	Tier 4 Interim	1.00	8.00	376	0.38
Paving	Scrapers	Diesel	Tier 4 Interim	1.00	1.00	423	0.48
Paving	Plate Compactors	Diesel	Average	1.00	1.00	8.00	0.43
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	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	40.0	12.8	LDA,LDT1,LDT2
Demolition	Vendor	6.00	7.30	HHDT,MHDT
Demolition	Hauling	60.0	20.0	HHDT
Demolition	Onsite truck	2.00	1.00	HHDT,MHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	40.0	12.8	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	7.30	HHDT,MHDT
Site Preparation	Hauling	300	20.0	HHDT
Site Preparation	Onsite truck	2.00	1.00	HHDT,MHDT
Grading	—	—	—	—
Grading	Worker	40.0	12.8	LDA,LDT1,LDT2
Grading	Vendor	6.00	7.30	HHDT,MHDT
Grading	Hauling	18.0	20.0	HHDT
Grading	Onsite truck	2.00	1.00	HHDT,MHDT
Building Construction 1	—	—	—	—
Building Construction 1	Worker	78.0	12.8	LDA,LDT1,LDT2

Building Construction 1	Vendor	8.00	7.30	HHDT,MHDT
Building Construction 1	Hauling	20.0	20.0	HHDT
Building Construction 1	Onsite truck	3.00	1.00	HHDT,MHDT
Paving	—	—	—	—
Paving	Worker	40.0	12.8	LDA,LDT1,LDT2
Paving	Vendor	6.00	7.30	HHDT,MHDT
Paving	Hauling	2.00	20.0	HHDT
Paving	Onsite truck	2.00	1.00	HHDT,MHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	12.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.30	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	1.00	1.00	HHDT,MHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	40.0	12.8	LDA,LDT1,LDT2
Demolition	Vendor	6.00	7.30	HHDT,MHDT
Demolition	Hauling	60.0	20.0	HHDT
Demolition	Onsite truck	2.00	1.00	HHDT,MHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	40.0	12.8	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	7.30	HHDT,MHDT
Site Preparation	Hauling	300	20.0	HHDT
Site Preparation	Onsite truck	2.00	1.00	HHDT,MHDT
Grading	—	—	—	—

Grading	Worker	40.0	12.8	LDA,LDT1,LDT2
Grading	Vendor	6.00	7.30	HHDT,MHDT
Grading	Hauling	18.0	20.0	HHDT
Grading	Onsite truck	2.00	1.00	HHDT,MHDT
Building Construction 1	—	—	—	—
Building Construction 1	Worker	78.0	12.8	LDA,LDT1,LDT2
Building Construction 1	Vendor	8.00	7.30	HHDT,MHDT
Building Construction 1	Hauling	20.0	20.0	HHDT
Building Construction 1	Onsite truck	3.00	1.00	HHDT,MHDT
Paving	—	—	—	—
Paving	Worker	40.0	12.8	LDA,LDT1,LDT2
Paving	Vendor	6.00	7.30	HHDT,MHDT
Paving	Hauling	2.00	20.0	HHDT
Paving	Onsite truck	2.00	1.00	HHDT,MHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	12.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.30	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	1.00	1.00	HHDT,MHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
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Architectural Coating	135,144	45,048	0.00	0.00	3,340
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5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,500	—
Site Preparation	66,738	0.00	15.0	0.00	—
Grading	7,500	0.00	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.28

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Parking Lot	1.28	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005
2026	0.00	204	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
Condo/Townhouse	520	578	446	188,883	7,753	8,622	6,652	2,817,745
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
Condo/Townhouse	520	578	446	188,883	7,753	8,622	6,652	2,817,745
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

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	36
No Fireplaces	35
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0
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5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	36
No Fireplaces	35
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
135144.44999999998	45,048	0.00	0.00	3,340

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)
Condo/Townhouse	303,489	204	0.0330	0.0040	0.00
Parking Lot	48,767	204	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	304,499	204	0.0330	0.0040	-7,716
Parking Lot	48,767	204	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)
Condo/Townhouse	2,574,914	6.59
Parking Lot	0.00	1.08

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
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Condo/Townhouse	2,574,914	6.59
Parking Lot	0.00	1.08

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	54.7	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	54.7	—
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
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	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
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Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	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
—	—

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	8.54	annual days of extreme heat
Extreme Precipitation	6.90	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	14.3	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	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.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
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Exposure Indicators	—
AQ-Ozone	7.52
AQ-PM	14.5
AQ-DPM	30.0
Drinking Water	48.2
Lead Risk Housing	23.7
Pesticides	82.8
Toxic Releases	28.0
Traffic	21.1
Effect Indicators	—
CleanUp Sites	46.1
Groundwater	30.9
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	38.6
Cardio-vascular	20.9
Low Birth Weights	60.1
Socioeconomic Factor Indicators	—
Education	14.8
Housing	42.3
Linguistic	0.00
Poverty	6.73
Unemployment	1.15

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	91.03041191
Employed	89.79853715
Median HI	83.63916335
Education	—
Bachelor's or higher	78.91697677
High school enrollment	100
Preschool enrollment	88.41267804
Transportation	—
Auto Access	43.87270627
Active commuting	72.95008341
Social	—
2-parent households	52.82946234
Voting	91.50519697
Neighborhood	—
Alcohol availability	59.74592583
Park access	35.26241499
Retail density	11.88245862
Supermarket access	2.399589375
Tree canopy	93.41716925
Housing	—
Homeownership	81.12408572
Housing habitability	44.70678814
Low-inc homeowner severe housing cost burden	43.85987425
Low-inc renter severe housing cost burden	88.29718979
Uncrowded housing	33.18362633

Health Outcomes	—
Insured adults	88.86179905
Arthritis	0.0
Asthma ER Admissions	65.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	54.6
Cognitively Disabled	26.7
Physically Disabled	29.8
Heart Attack ER Admissions	91.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	68.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	7.9
SLR Inundation Area	31.3

Children	71.1
Elderly	28.7
English Speaking	74.8
Foreign-born	17.8
Outdoor Workers	33.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.3
Traffic Density	2.3
Traffic Access	23.0
Other Indices	—
Hardship	23.7
Other Decision Support	—
2016 Voting	92.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	11.0
Healthy Places Index Score for Project Location (b)	90.0
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	Updated acreages 4/2023
Construction: Trips and VMT	Added onsite travel with mixed vehicles
Construction: Construction Phases	Approximately 18 month construction duration
Construction: Dust From Material Movement	Site Prep Building materials would be transported to the site Grading import approximately 7,500 cubic yards of fill
Operations: Energy Use	No natural gas
Operations: Hearths	No natural gas
Construction: Off-Road Equipment	Modified with Midpen inputs
Construction: Demolition	20,840 CY of site concrete to demo accounted for in haul trips