

GREENHOUSE GAS ASSESSMENT

**Oakcrest Specific Plan
City of San Marcos, CA**

Prepared for:

**City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069**

Prepared By:

Ldn Consulting, Inc.
**23811 Washington Ave, C110-333
Murrieta, California 92562**

November 19, 2025

TABLE OF CONTENTS

TABLE OF CONTENTS	II
LIST OF FIGURES	III
LIST OF TABLES	III
ATTACHMENTS	III
LIST OF COMMON ACRONYMS	IV
1.0 INTRODUCTION	1
1.1 PROJECT DESCRIPTION	1
1.2 PROJECT LOCATION	1
1.3 SITE SPECIFIC GENERAL PLAN BUILDOUT SCENARIO	4
1.4 PURPOSE OF THIS REPORT.....	5
2.0 BACKGROUND AND ENVIRONMENTAL SETTING	6
2.1 UNDERSTANDING CLIMATE CHANGE AND GREENHOUSE GASES.....	6
2.2 CLIMATE AND METEOROLOGY	7
3.0 CLIMATE CHANGE REGULATORY ENVIRONMENT	9
3.1 STATE	9
3.2 GHG THRESHOLDS OF SIGNIFICANCE	21
4.0 METHODOLOGY	24
4.1 GENERAL PLAN LAND USE OF THE SITE.....	24
4.2 CONSTRUCTION CO ₂ E EMISSIONS CALCULATION METHODOLOGY.....	24
4.3 OPERATIONAL EMISSIONS CALCULATION METHODOLOGY	25
5.0 FINDINGS	27
5.1 ESTIMATED CONSTRUCTION EMISSIONS (PROPOSED PROJECT AND GENERAL PLAN BUILDOUT SCENARIO.....	27
5.2 PROPOSED PROJECT OPERATIONAL EMISSIONS	28
5.3 GENERAL PLAN BUILDOUT SCENARIO CONSTRUCTION AND OPERATIONAL EMISSIONS.....	29
5.4 CEQA COMPLIANCE.....	30
5.5 PROJECT SPECIFIC REQUIREMENTS (CAP AND TITLE 24).....	31
6.0 REFERENCES	33

List of Figures

FIGURE 1-A: PROPOSED PROJECT SITE DEVELOPMENT PLAN..... 2
FIGURE 1-B: PROJECT VICINITY MAP 3
FIGURE 2-A: EXISTING SITE LAYOUT..... 8

List of Tables

TABLE 4.1: EXPECTED CONSTRUCTION EQUIPMENT25
TABLE 5.1: PROPOSED PROJECT - ANNUAL CONSTRUCTION CO₂E EMISSIONS (MT CO₂E/YEAR).....27
TABLE 5.2: GP BUILDOUT - ANNUAL CONSTRUCTION CO₂E EMISSIONS (MT CO₂E/YEAR)27
TABLE 5.3: OPERATIONAL EMISSIONS SUMMARY MT/YEAR (PROPOSED PROJECT)28
TABLE 5.4: OPERATIONAL EMISSIONS SUMMARY MT/YEAR (GP BUILDOUT SCENARIO)29

Attachments

CALEEMOD EMISSION MODEL – PROPOSED PROJECT35
CALEEMOD EMISSION MODEL – GENERAL PLAN BUILDOUT SCENARIO120

LIST OF COMMON ACRONYMS

Assembly Bill 32 (AB32)

Business as Usual (BAU)

California Air Pollution Control Officers Association's (CAPCOA)

California Air Resource Board (CARB)

California Environmental Quality Act (CEQA)

Carbon Dioxide (CO₂)

Climate Action Plan (CAP)

Cubic Yards (CY)

Environmental Protection Agency (EPA)

Electric Vehicle (EV)

Greenhouse Gas (GHG)

International Residential Code (IRC)

Low Carbon Fuel Standard (LCFS)

Methane (CH₄)

Metric Tons of Carbon Dioxide Equivalent (MT CO₂e)

Nitrous Oxide (N₂O)

San Diego Air Basin (SDAB)

San Diego Air Pollution Control District (SDAPCD)

Senate Bill 97 (SB97)

Vehicle Miles Traveled (VMT)

1.0 INTRODUCTION

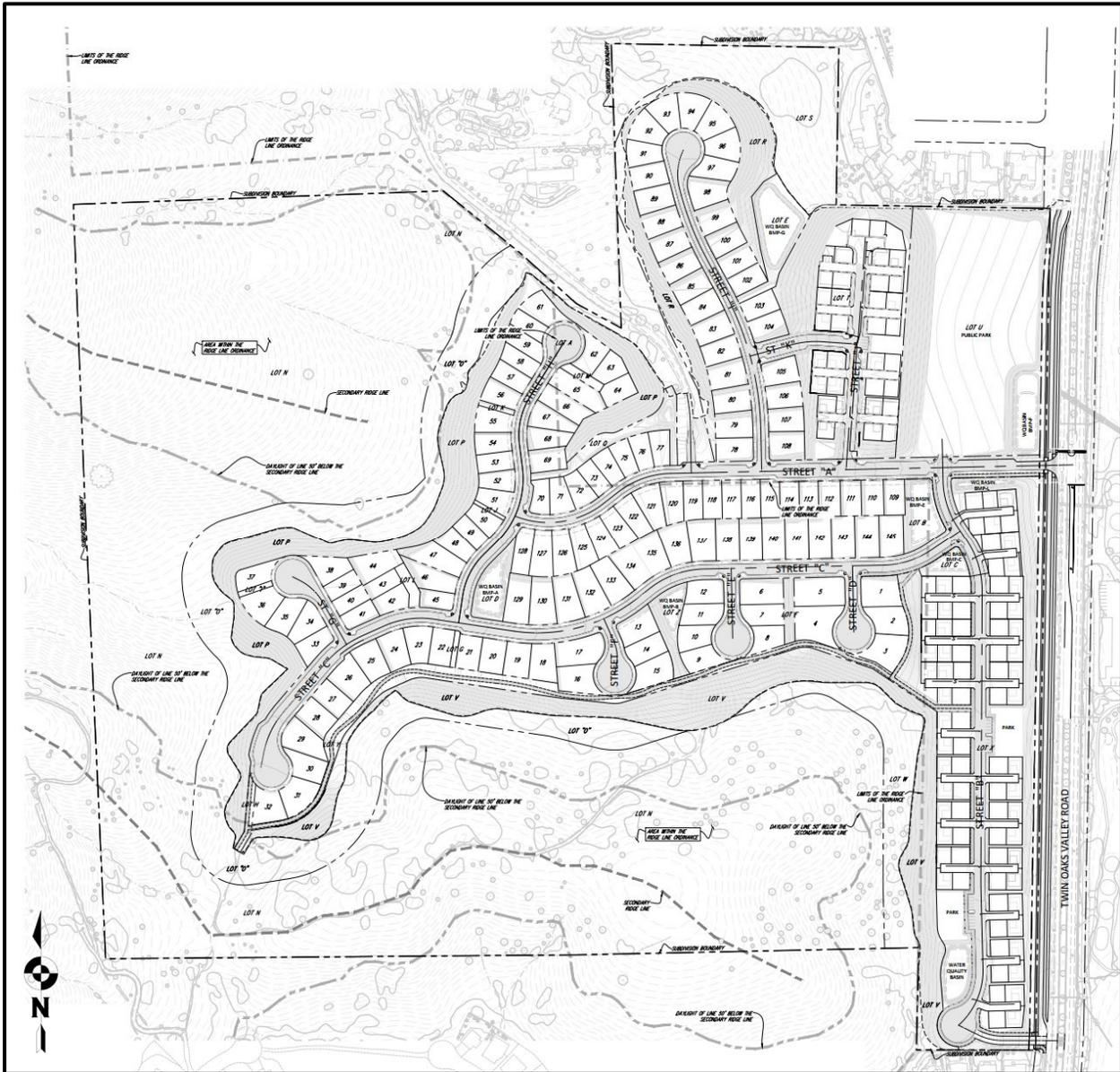
1.1 Project Description

The project proposes to construct 257 single-family detached residential units, 6.22 acres of public park and 52 acres of preserved open space on approximately 137 gross acres. The project applicant is proposing a Specific Plan (SP25-0004), General Plan (GP) Amendment (GPA25-0005), a Rezone (R25-0004), Tentative Subdivision Map (TM24-0006), two Site Development Plans (SDP-0002 and SDP-0003) and a Conditional Use Permit (CUP25-0001). The first full year of operations is expected in 2030. The project development plan is shown in Figure 1-A.

1.2 Project Location

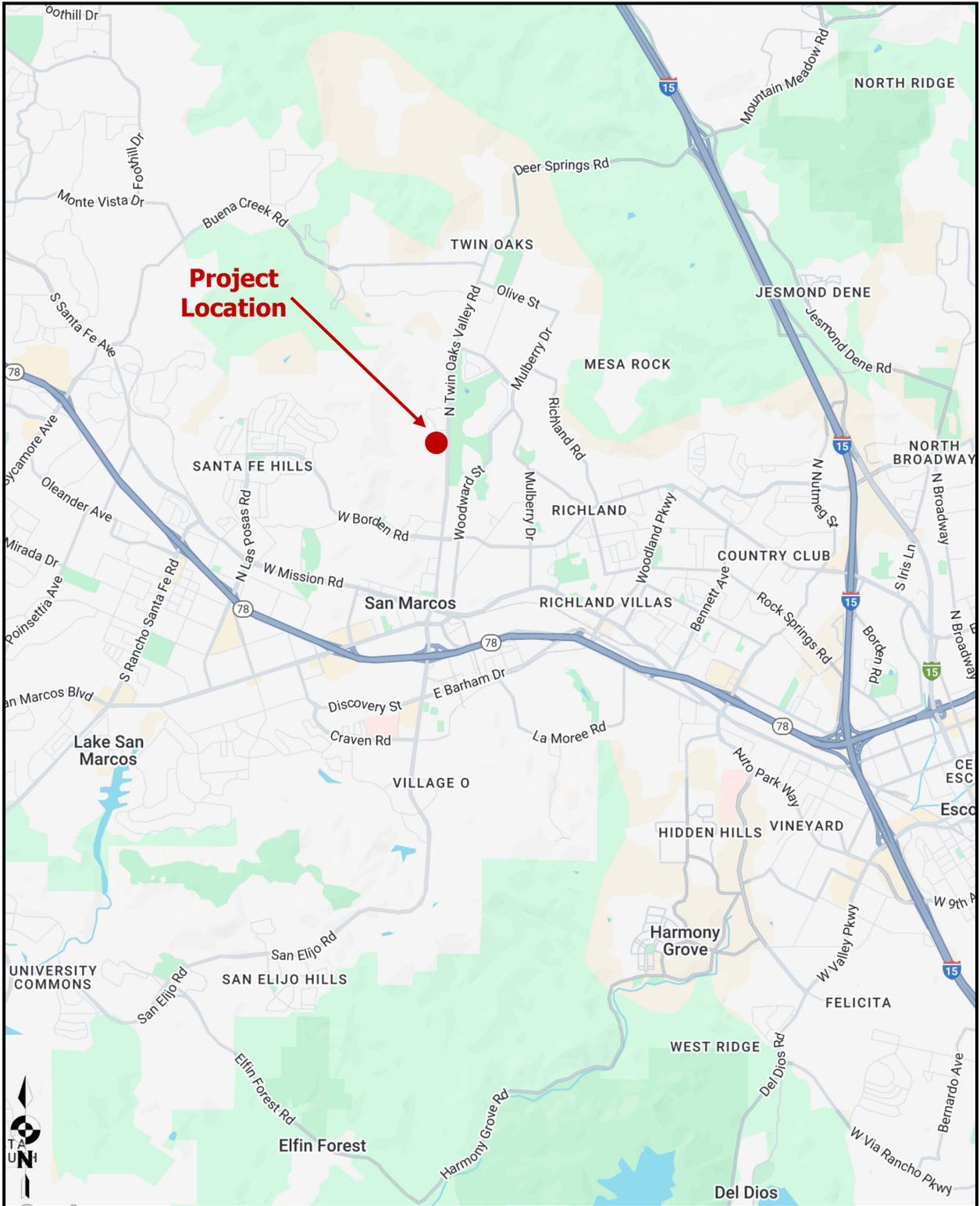
The 137-acre project site (Assessor Parcel Numbers (APNs) 218-110-02-00, 218-110-03-00, 218-330-05-00, 218-330-08-00, 218-330-09-00, 218-330-13-00, 218-330-26-00, 218-330-27-00, and 218-330-28-00) is located north of State Route 78 (SR-78), on the west side of North Twin Oaks Valley Road, north of Legacy Drive, and south of Deerbrook Drive in the City of San Marcos. A project vicinity map and location map are shown in Figure 1-A. The existing site is mostly vacant with three existing single-family residences and associated accessory structures. The project is bounded by existing single-family residences to the north and south, open space to the west, and North Twin Oaks Valley Road to the east. The Twin Oaks Valley Golf Course is located east of the project across North Twin Oaks Valley Road. A project vicinity map is shown in Figure 1-B.

Figure 1-A: Proposed Project Site Development Plan



Source: (Excel Engineering, 2025)

Figure 1-B: Project Vicinity Map



Source: (Google, 2025)

1.3 Site Specific General Plan Buildout Scenario

The project site has a GP designation of RR (Rural Residential) and AG (Agriculture/Residential). Per the Land Use and Community Design Element of the City's GP, Rural Residential is identified for single-family residences with a density of up to 2 dwelling units/acre (du/ac) and limited agricultural uses such as flower and vegetable gardens, fruit trees and horticultural stock. Under the Agriculture/Residential designation, agricultural uses are the primary use, and could include greenhouses, wholesale nurseries, and agricultural crops. Raising poultry, cattle, birds, small animals, horses, and bovine animals is also permitted under the Agriculture/Residential designation. Agricultural tourism activities may also be allowed. Residential development is an allowable use with the Agriculture/Residential designation with up to 1.0 du/ac based on location and slope (City of San Marcos 2012).

The project site is also noted with an "S" designator in the City's GP. The "S" designator indicates the project site could be the location of a future school. In 2021, SMUSD considered purchase of the project site for the construction of a new high school. After further site review, SMUSD decided to drop the site from consideration as a school site in late 2021 (DTSC 2025). However, the "S" designator is still indicated for the project site in the City's GP and would allow for the development of a school site.

The project site also has a "P" designator in the GP. The "P" designator indicates the project site could be the location of a future park. The City of San Marcos Parks Master Plan Update indicates a potential future park of up to 26.45 acres in the Twin Oaks Valley neighborhood (San Marcos 2018). Per the 1990 Parks Master Plan, as referenced in the 2018 Parks Master Plan Update, amenities for a future Twin Oaks Valley Neighborhood Park could include a large overlay field, softball field, tennis courts, basketball courts, playground and tot lot, picnic and barbeque facilities and other amenities as determined at the time of planning and development.

A possible development scenario under this alternative would include a 16-acre public park (8 acres of playing fields and 8 acres of public park), a 56-acre high school with up to 2,585 students, 89 single family residential units and 52 acres of biological open space. The overall footprint of development would likely be similar to the proposed Project, in that the development would be focused outside of the high-quality habitat, steeper elevations and outside of the ROZ buffer. It is expected that the high school would be two stories and have playing fields. The single-family residences would be a motor court clustered product that would be two stories high.

According to San Diego Association of Governments (SANDAG) trip generation rates, a high school generates approximately 60 average daily trips (ADT) per acre (SANDAG, 2002). Based

on the 56-acre site, this equates to approximately 3,360 ADT. Because CalEEMod requires school-related trips to be entered by the number of students, the 3,360 ADT value was converted using SANDAG's factor of 1.3 ADT per student (SANDAG, 2002), resulting in approximately 2,585 students for modeling purposes. It should be noted that CalEEMod uses 180 days for schools with the exception of mobile emissions. High school mobile source emissions were adjusted to reflect 180 days of operation per year, rather than 365 days, to account for the academic calendar. The trip generation for the overall GP Buildout scenario is expected to be 4,864 ADT while school is in session for 180 days and 1,504 ADT when school is not in session.

Demolition of the existing residences, grading, blasting and rock crushing as well as fire fuel modification would be required for the GP Buildout scenario.

1.4 Purpose of this Report

The purpose of this Greenhouse Gas (GHG) Assessment is to analyze the project's GHG emissions and evaluate its conformance with the City of San Marcos' Climate Action Plan (CAP). As described in the City's CAP, there is an existing framework of federal, State, regional, and local policies and regulations that identify GHG reduction requirements. The CAP provides a plan for the City to meet these requirements and achieve local reduction requirements outlined in the CAP. In addition, as identified in the CAP, showing consistency with the CAP would also demonstrate that the proposed Project would have a less than significant impact under the California Environmental Quality Act (CEQA) (City of San Marcos, 2020).

The proposed Project seeks to modify the existing zoning as identified in the proposed SPA. To show consistency with the CAP, the GHG intensity of the SPA would be generally required to show fewer GHG emissions than would otherwise be allowed under the GP buildout of the site. This analysis has been completed in order to compare GHG emissions from both the proposed Project and the GP Buildout scenario.

2.0 BACKGROUND AND ENVIRONMENTAL SETTING

2.1 Understanding Climate Change and Greenhouse Gases

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in the Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere. The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows:

Short-wave radiation emitted by the sun is absorbed by the Earth. The Earth emits a portion of this energy in the form of long-wave radiation and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs into the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

Some greenhouse gases are emitted exclusively from human activities (e.g., synthetic halocarbons). Others occur naturally but are found at elevated levels due to human inputs (e.g., carbon dioxide). Anthropogenic sources result from energy-related activities (e.g., combustion of fossil fuels in the electric utility and transportation sectors), agriculture, land-use change, waste management and treatment activities, and various industrial processes. Major greenhouse gases include carbon dioxide, methane, nitrous oxide, and various synthetic chemicals (EPA, 2023). The GHGs typically analyzed in a greenhouse gas study are Carbon Dioxide (CO₂), Methane (CH₄), and Nitrous Oxide (N₂O) because they are emitted in the greatest quantities from human activities. A brief description of each GHG follows:

Carbon Dioxide (CO₂) is widely reported as the most important anthropogenic greenhouse gas because it currently accounts for the greatest portion of the warming associated with human activities. Carbon dioxide occurs naturally as part of the global carbon cycle, but human activities have increased atmospheric loading through combustion of fossil fuels and other emissions sources. Natural sinks that remove carbon dioxide from the atmosphere (e.g., oceans, plants) help regulate carbon dioxide concentrations, but human activities can disturb these processes (e.g., deforestation) or enhance them (EPA, 2023).

Methane comes from many sources, including human activities such as coal mining, natural gas production and distribution, waste decomposition in landfills, and digestive processes in livestock and agriculture. Natural sources of methane include wetlands and termite mounds (EPA, 2023).

Nitrous Oxide is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels (EPA, 2023).

To simplify greenhouse gas calculations, both CH₄ and N₂O are converted to an equivalent amount of carbon dioxide, or CO₂e. CO₂e is calculated by multiplying the calculated levels of CH₄ and N₂O by a Global Warming Potential (GWP). GWPs for both CH₄ and N₂ are presented within the 2007 Intergovernmental Panel on Climate Change (IPCC) report as being 25 and 298, respectively (IPCC, 2007). The IPCC 2007 report was updated in 2021 and now recommends adding a 100-year timeline to the GWP discussions (GWP-100). For CH₄ the GWP is between 27-30 and the GWP for N₂O is 273 (USEPA, 2023). Since CalEEMod is the adopted computer model for calculating GHGs, the earlier GWPs within CalEEMod were utilized.

2.2 Climate and Meteorology

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances with cooler temperatures on the western coast gradually warming to the east as prevailing winds from the west heats up. Most of southern California is dominated by high-pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically, during the winter months, the high-pressure system drops to the south and brings cooler, moister weather from the north. It is common for inversion layers to develop within high-pressure areas, which mostly define pressure patterns over the SDAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning. The City of San Marcos is within the SDAB so the same generalizations are true for the City.

Meteorological trends within the area generally show daytime highs ranging between 64°F in the winter to approximately 88°F in the summer with August usually being the hottest month. Daytime Low temperatures range from approximately 37°F in the winter to approximately 59°F in the summer. Precipitation is generally about 16.2 inches per year (WRCC, 2021). Prevailing wind patterns for the area vary during any given month during the year and also vary depending on the time of day or night. The predominant pattern throughout the year is usually from the west or westerly (WRCC, 2018). The existing site aerial map is shown in Figure 2-A.

Figure 2-A: Existing Site Layout



Source: (Google Earth Pro, 2025)

3.0 **CLIMATE CHANGE REGULATORY ENVIRONMENT**

3.1 State

State Greenhouse Gas Targets

Executive Order S-3-05

EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050.

AB 32 and CARB's Climate Change Scoping Plan

In furtherance of the goals established in EO S-3-05, the Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, the California Air Resources Board (CARB) is responsible for and is recognized as having the expertise to carry out and develop the programs and regulations necessary to achieve the GHG emissions reduction mandate of AB 32. Therefore, in furtherance of AB 32, CARB adopted regulations requiring the reporting and verification of GHG emissions from specified sources, such as industrial facilities, fuel suppliers and electricity importers (see Health & Safety Code Section 35830; Cal. Code Regs., tit. 17, §§95100 et seq.). CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons (MMT) CO₂E). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change (2008 Scoping Plan)* in accordance with Health and Safety Code Section 38561. The *2008 Scoping Plan* established an overall framework for the measures to be implemented to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The *2008 Scoping Plan* evaluated opportunities for sector-specific reductions,

integrated all CARB and Climate Action Team¹ early actions and additional GHG reduction features by both entities, identified additional measures to be pursued as regulations, and outlined the role of a cap-and-trade program.

In the *2008 Scoping Plan*, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as “Business-As-Usual” [BAU]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the *2008 Scoping Plan’s* Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 percent (down from 28.5 percent) from the BAU conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (12 percent to 20 percent), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16 percent (down from 28.5 percent) from the BAU conditions.

In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework (First Update)*. The stated purpose of the *First Update* was to “highlight California’s success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.” The *First Update* found that California was on track to meet the 2020 emissions reduction mandate established by AB 32, noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim goal of reducing

¹ The Climate Action Team is comprised of state agency secretaries and heads of state agencies, boards and departments; these members work to coordinate statewide efforts to implement GHG emissions reduction programs and adaptation programs.

statewide GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050 as set forth in S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's *Scoping Plan* to express the 2030 target in terms of MMT CO₂e. The EO also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016.

SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction target; make changes to CARB's membership and increase legislative oversight of CARB's climate change-based activities; and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members. The legislation further requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and identify specific information for GHG emissions reduction measures when updating the scoping plan, including information regarding the range of projected GHG emissions and air pollution reductions that result from each measure and the cost-effectiveness (including avoided social costs) of each measure (see Health & Safety Code Section 38562.7).

2017 and 2022 Scoping Plan

In November 2017, CARB released *California's 2017 Climate Change Scoping Plan* for public review and comment (CARB, 2017). This update includes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below). The strategy includes continuing the Cap-and-Trade Program through 2030,² inclusive policies and broad support for clean technologies, enhanced industrial efficiency and competitiveness, prioritization of transportation sustainability, continued leadership on clean energy, putting

² In July 2017, AB 398 was enacted into law, thereby extending the legislatively-authorized lifetime of the Cap-and-Trade Program to December 31, 2030.

waste resources to beneficial use, supporting resilient agricultural and rural economics and natural and working lands, securing California’s water supplies, and cleaning the air and public health. When discussing project-level GHG emissions reduction actions and thresholds, the *2017 Scoping Plan* states “[a]chieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development.” However, the *2017 Scoping Plan* also recognizes that such an achievement “may not be feasible or appropriate for every project ... and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.” CARB’s Governing Board adopted the *2017 Scoping Plan* in December 2017.

In 2022 California released the latest scoping plan update which lays out the sector-by-sector roadmap for California to achieve carbon neutrality by 2045. This plan, addressing recent legislation and direction from Governor Newsom, extends and expands upon these earlier plans with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045 (CARB, 2022). The plan suggests that bold steps are required by the State and calls for the need of vast research and development with respect to methods of capturing CO₂. The plan calls for a need to take an unprecedented transformation and aggressively seek reductions to reduce the need of fossil fuels by moving to zero emission transportation, electrifying the cars, buses, trucks and trains. The plan relays on external controls and requires partnership and collaboration with the federal government, other U.S. states, and other jurisdictions around the world for California to succeed in achieving its climate targets.

Assembly Bill 1279

In 2022, the Governor approved Assembly Bill 1279 (AB 1279) (State of California, 2022) which requires the state board to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions and to update the scoping plan at least once every 5 years. This bill, the California Climate Crisis Act, would declare the policy of the state both to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter, and to ensure that by 2045, statewide anthropogenic greenhouse gas emissions are reduced to at least 85 percent below the 1990 levels.

California Building Standards

Title 24, Part 6

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California’s building standards. While not initially promulgated to reduce

GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new buildings and alterations or additions to existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current code requirement is based on the 2022 standards, as those standards went into effect on January 1, 2023. The 2022 standards have mandatory requirements to reduce building envelope air leakage, improve roofing through Solar Reflectance and Thermal Emittance, improve on insulation, improve on space conditioning, water heating and plumbing, improve on lighting efficiency requirements to name a few. The project will be required to implement Title 24 2022.

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards initially took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective on January 1, 2017. The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings.
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance.
- Sixty-five (65) percent of construction and demolition waste must be diverted from landfills.
- Mandatory inspections of energy systems to ensure optimal working efficiency.
- Inclusion of EV charging stations or designated spaces capable of supporting future charging stations.

- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements; stricter water conservation, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 75 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.

The newest CALGreen Standards were updated in 2022 and became effective on January 1, 2023. The updated Code includes modifications to current codes and will be a requirement to the Project. Mandatory requirements include many updated Electric Vehicle Charging requirements for multi and single-family developments (California Title 24, Part 11, 2022).

Title 20

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems.

Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Mobile Sources

AB 1493

In response to the transportation sector accounting for more than half of California's CO₂ emissions, AB 1493 was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30 percent (CARB, 2017).

EO S-1-07

Issued in January 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO₂e grams per unit of fuel energy sold in California. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009 and began implementation in 2011. The LCFS is designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector.

The latest amendment to LCFS implementation regulations was in 2018 and CARB approved amendments which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32 (CARB, 2018).

SB 375

SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations (MPOs) are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan. The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible and if implemented, the GHG reduction targets. If a SCS is unable to achieve the GHG reduction target, an MPO must

prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), a SCS does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a cities or counties land use policies and regulations, including those in a GP , be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for SANDAG adopted in 2010 are a 7 percent reduction in emissions per capita by 2020 and a 13 percent reduction by 2035; the targets are expressed as a percent change in per capita passenger vehicle GHG emissions relative to 2005.

In October 2015, SANDAG adopted *San Diego Forward: The Regional Plan*. In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region. More specifically, as set forth in CARB Executive Order G-15-075, CARB determined that SANDAG's SCS would achieve a 15 percent per capita reduction by 2020 and a 21 percent per capita reduction by 2035.

In 2018, CARB updated the SB 375 targets. For purposes of SANDAG, the updated targets include a 15 percent reduction in emissions per capita by 2020 and a 19 percent reduction by 2035 (CARB, 2018). SANDAG is in the process of preparing its next SCS, which will consider whether and how the region could attain these reduction targets.

SANDAG approved the 2021 Regional Plan in December 2021. The Plan provides a big picture vision for how the San Diego region will grow through 2050 and beyond with an implementation program to help make the plan a reality. Within the Draft Plan, SANDAG introduced a transformative vision for transportation in San Diego County that completely reimagines how people and goods could move throughout the region in the 21st century. The plan outlines the "5 Big Moves" which are: Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, and the Next OS. This plan is the region's long-term plan which will be implemented incrementally through the Regional Transportation Improvement Program (RTIP) (SANDAG, 2021).

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan without the regional road usage charge. In developing the amendment,

SANDAG will refine the financial strategies used in the 2021 Regional Plan to achieve the region's greenhouse gas emissions target set by CARB, without the road usage charge. SANDAG will also assess the region's continued ability to meet air quality standards. An Amendment to the 2021 Regional Plan removing the regional road user charge was adopted by SANDAG in October 2023. The 2025 Regional Plan is currently in development and also will not include a regional road user charge.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB, 2017). To improve air quality, CARB has also implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that, in 2025, cars will emit 75 percent less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, also has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34 percent in 2025 (California Air Resources Board, 2012).

This program was recently updated and is known as the Advanced Clean Cars II (ACC II) Program which continues the concept of increasing stringency for fuel-efficiency standards and increasing the number of zero emission vehicles (ZEVs) (CARB, 2023). The regulations are two-pronged. First, it amends the Zero-emission Vehicle (ZEV) Regulation to require an increasing number of ZEVs, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards. These amendments support Governor Newsom's 2020 Executive Order N-79-20 that requires all new passenger vehicles sold in California to be zero emissions by 2035. Second, the Low-emission Vehicle Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

In October 2023, staff launched a new effort to consider potential amendments to the Advanced Clean Cars II regulations, including updates to the tailpipe greenhouse gas emission standard and limited revisions to the Low-emission Vehicle and ZEV regulations.

EO N-79-20, Zero Emission by 2035, calls for elimination of new internal combustion passenger vehicles by 2035 (CARB, 2023). By setting a course to end sales of internal combustion passenger vehicles by 2035, the Governor's Executive Order establishes a target

for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the Executive Order focuses on new vehicle sales for automakers and therefore does not require Californians to give up the existing cars and trucks they already own. The primary mechanism for achieving the ZEV target for passenger cars and light trucks is the Advanced Clean Cars (ACC) II Program.

As part of the Executive Order, the Governor's Office of Business and Economic Development (GO-Biz) was tasked with preparing a ZEV Market Development Strategy along with the accompanying California State agency ZEV Action Plans.

In addition to ACC II, the Clean Miles Standard regulation will also help enable the goal of 100% ZEV sales in 2035 by creating demand for ZEVs. This regulation will have aggressive requirements for electric miles that will transition ride-hailing fleets to zero-emission operations starting in 2023 and ramping up through 2030. This regulation was approved by the CARB Board in 2021.

EO B-16-12

EO B-16-12 (March 2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution of ZEVs. This EO also sets a long-term target of reaching 1.5 million zero-emission vehicles on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80 percent less than 1990 levels by 2050. In furtherance of this EO, the Governor convened an Interagency Working Group on Zero-Emission Vehicles that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

SB 350

In 2015, SB 350 – the Clean Energy and Pollution Reduction Act – was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see Public Utilities Code Section 740.12).

Renewable Energy Procurement

SB 1078

SB 1078 (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1 percent of sales, with an aggregate goal of 20 percent by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20 percent of their power from renewable sources by 2010.

SB X1 2

SB X1 2 (2011) expanded the RPS by establishing that 20 percent of the total electricity sold to retail customers in California per year by December 31, 2013, and 33 percent by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350

SB 350 (2015) further expanded the RPS by establishing that 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030 be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency.

SB 100

SB 100 (2018) has further accelerated and expanded the RPS, requiring achievement of a 50 percent RPS by December 31, 2026 and a 60 percent RPS by December 31, 2030. SB 100 also established a new statewide policy goal that calls for eligible renewable energy resources and zero-carbon resources to supply 100 percent of electricity retail sales within the State of California by December 31, 2045.

SB 1020

In 2022, the Governor approved SB 1020 (State of California, 2022). This bill requires the state board to conduct a series of public workshops to give interested parties an opportunity to comment on the plan and requires a portion of those workshops to be conducted in regions of the state that have the most significant exposure to pollutants. This bill includes as regions for these workshops federal extreme nonattainment areas that have communities with minority populations, communities with low-income populations, or both.

Under existing law, it was the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use

customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045.

This bill revised the state policy to instead provide that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035, as specified.

Water

EO B-29-15

In response to drought-related concerns, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Solid Waste

AB 939 and AB 341

AB 939 (1989), known as the Integrated Waste Management Act (Public Resources Code Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25 percent by 1995 and 50 percent by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources

Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75 percent goal by 2020.

Increasing the amount of commercial solid waste that is recycled, reused, or composted will reduce GHG emissions primarily by 1) reducing the energy requirements associated with the extraction, harvest, and processing of raw materials and 2) using recyclable materials that require less energy than raw materials to manufacture finished products (CalRecycle, 2020). Increased diversion of organic materials (green and food waste) will also reduce GHG emissions (CO₂ and CH₄) resulting from decomposition in landfills by redirecting this material to processes that use the solid waste material to produce vehicle fuels, heat, electricity, or compost.

AB 1826 (2014)

In October 2014 Governor Brown signed AB 1826 which requires businesses to recycle their organic waste as of April 1, 2016. The law also required that after January 1, 2016, local jurisdictions across the state were required to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. This requires business generating over 8 cubic yards (CY) of waste per week to arrange organic waste recycling services. The law also contained a trigger that allowed for increased implementation. For example, in 2019 CalRecycle changed the 8 CY threshold to 4 CY and then in 2020 to 2 CY for business to implement organic recycling programs (CalRecycle, 2023).

Senate Bill 1383

Short-Lived Climate Pollutants: Organic (2016) is a statewide effort to reduce emissions of short-lived climate pollutants (SLCP) (CalRecycle, 2016). Specifically, the law sets the following targets: 1) Reduce statewide disposal of organic waste by 50% by January 1, 2020 and by 75% by January 1, 2025 (based on 2014 levels), and 2) rescue at least 20% of currently disposed of edible food for human consumption by 2025.

3.2 GHG Thresholds of Significance

The City of San Marcos (City) adopted an updated Climate Action Plan (CAP) on December 8, 2020. The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State GHG emissions reduction targets. The CAP is a plan for the reduction of GHG emissions in accordance with (CEQA Guidelines Section 15183.5). Pursuant

to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it is consistent with the City's CAP. The CAP set the following citywide targets (City of San Marcos, 2020).

- 4 percent below 2012 levels (575,000 MT CO₂e) by 2020
- 42 percent below 2012 levels (347,000 MT CO₂e) by 2030

The City has also developed a Climate Action Plan Consistency Review Checklist (CAP Consistency Checklist), in conjunction with the CAP, to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. The CAP Consistency Guidance Memo dated July 15, 2020 summarizes the methodology and application of a GHG screening threshold which is set at 500 metric tons carbon dioxide equivalent [MT CO₂e] per year as outlined in the CAP (Ascent, 2020). Projects that are projected to emit fewer than 500 MT CO₂e annually would not make a considerable contribution to the cumulative impact of climate change and would not need to provide additional analysis to demonstrate consistency with the CAP. It should be noted that this screening threshold is for new development projects consistent with the City's GP. When such a project exceeds the screening threshold, the project would be required to demonstrate consistency with the CAP through the CAP Consistency Checklist.

In most cases, compliance with the CAP Consistency Checklist would provide the CEQA streamlining path to allow project specific environmental documents, if eligible, to tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts. Projects that are consistent with the GP and implement CAP GHG reduction measures may incorporate by reference the CAP's cumulative GHG analysis. The City's CAP meets the requirements under Section 15183.5 of the CEQA Guidelines as a qualified plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. The CAP Consistency Checklist provides a streamlined review process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA.

If a project is consistent with the existing GP land use designation(s), it can be determined to be consistent with the CAP projections and can move forward to Step 2 of the CAP Consistency Checklist.

In addition, some projects may seek a GP amendment. For these projects, the CAP Consistency Checklist requires a determination on whether the amendment would result in an equivalent or less GHG-intensive project when compared to the existing land use designations. In addition to providing evidence to support the conclusion that the project would generate

fewer emissions than existing land use designations, these projects would demonstrate consistency with the CAP through completion of Step 2 of the CAP Consistency Checklist.

If a land use designation amendment results in a more GHG-intensive project, the project is required to prepare a quantitative GHG analysis based on applicable sections of the CEQA Guidelines.

4.0 METHODOLOGY

4.1 General Plan Land Use of the Site

As noted in Section 1.3 of this report, a possible development scenario under this alternative would include a 16-acre public park (8 acres of playing fields and 8 acres of public park), a 56-acre high school, 89 single family residential units and 52 acres of biological open space. The overall footprint of development would likely be similar to the proposed Project, in that the development would be focused outside of the high-quality habitat, steeper elevations and outside of the ROZ buffer. It is expected that the high school would be two stories and have playing fields. The single family residences would be a motor court clustered product that would be two stories high. Trip generation for this project is expected to be 4,864 ADT.

4.2 Construction CO₂e Emissions Calculation Methodology

GHGs related to construction and daily operations were calculated using the latest CalEEMod 2022.1 GHG model. The purpose of this analysis is to show compliance with CEQA through analysis using the City's CAP. This analysis focuses on the relative comparison between what is Proposed and the GP Buildout scenario. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the project. The CalEEMod input/output model is shown in **Attachment A** for the proposed Project and **Attachment B** for the GP Buildout scenario as described above.

The project would start demolition in early 2027 and it is assumed that up to 11,000 SF of existing buildings will be demolished and hauled offsite. Construction of all the residential units would be expected in approximately three years. Proposed earthwork activities includes 662,300 cubic yards (CY) of cut and 662,300 CY of fill, creating a balanced grading operation. However, as a worst-case assumption, it is assumed that as much as 7,000 CY of export will be required. As a design feature, the project's construction contractor will utilize Tier 3 rated diesel construction equipment with diesel particulate filters attached. Table 4.1 below describes the construction equipment and durations. All material haulage was modeled using defaults within CalEEMod.

It should be noted that the same durations were assumed for each scenario however, CalEEMod estimates that the GP Buildout component would have more materials so both worker and vendor trips are higher within the models.

Table 4.1: Expected Construction Equipment

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Demolition	1/1/2027	1/28/2027	
Concrete/Industrial Saws			1
Excavators			3
Rubber Tired Dozers			2
Site Preparation	1/29/2027	3/25/2027	
Rubber Tired Dozers			3
Tractors/Loaders/Backhoes			4
Grading	3/26/2027	12/2/2027	
Excavators			2
Graders			1
Rubber Tired Dozers			1
Scrapers			2
Tractors/Loaders/Backhoes			2
Bore/Drill Rigs			1
Crushing/Processing Equipment			1
Building Construction	12/3/2027	12/31/2029	
Cranes			1
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Paving	11/1/2029	12/31/2029	
Pavers			2
Paving Equipment			2
Rollers			2
Architectural Coating	8/1/2029	12/31/2029	
Air Compressors			1
This equipment list is based upon equipment inventory within CalEEMod. The quantity and types are based upon assumptions provided by the project applicant.			

4.3 Operational Emissions Calculation Methodology

Once construction is completed the proposed Project would generate emissions from daily operations which would include sources such as Area, Energy and Mobile uses, which are also calculated within CalEEMod. Area Sources include consumer products, landscaping and architectural coatings as part of regular maintenance. Energy sources would be from uses such as onsite electrical use. Mobile uses are from the expected project traffic trip generations. The operational model results are also shown in **Attachment A** at the end of this report.

The CalEEMod calculations include the following assumptions:

- The traffic inputs for CalEEMod were adjusted to be consistent with the proposed Project traffic study. Based on that study, the proposed Project would generate 2,393 average daily trips (LL&G Engineers, 2025).
- It was assumed that an average of 10% of the structural surface area will be re-painted each year.
- Since the proposed Project would not be installing hearth options, CalEEMod default hearth settings were modified to represent no hearth options.
- CalEEMod includes landscaping and consumer product assumptions which would apply to this project. Consumer product emissions are generated by a wide range of product categories, including air fresheners, automotive products, household cleaners, and personal care products.
- Project would be all electric and natural gas would not be installed.

CalEEMod utilizes 2019 Title 24 building standard efficiencies as defaults, though the project will need to comply with the latest Title 24 standards in effect at the time building permits are issued. Since the current 2022 Title 24 building standards increase efficiencies, this analysis based on 2019 building standards is conservative.

Solid municipal waste generated in the form of trash is also considered within this analysis as the decomposition of organic material breaks down to form GHGs. GHGs from water are also indirectly generated through the conveyance of the resource via pumping throughout the state and as necessary for wastewater treatment.

The Project traffic engineer estimated that the project would generate 2,393 daily trips (LL&G Engineers, 2025) and the City's traffic engineer indicated the GP Buildout scenario would generate 4,864 trips. As part of the GP Buildout analysis, the 56-acre high school site was assumed to generate 60 ADT per acre, consistent with SANDAG trip generation rates, resulting in 3,360 ADT (SANDAG, 2002). Because CalEEMod requires trip-based inputs in terms of students rather than acreage, this value was converted using SANDAG's factor of 1.3 ADT per student (SANDAG, 2002), resulting in approximately 2,585 students for modeling purposes. The Project traffic engineer (LL&G) validated these numbers as accurate for the GP Scenario. These traffic assumptions were utilized within the CalEEMod analysis to estimate associated operational emissions. These traffic numbers were utilized within the CalEEMod analysis. The operational modeling results for the proposed development and the GP Buildout scenario can also be seen in **Attachments A** and **-B** respectively.

5.0 FINDINGS

5.1 Estimated Construction Emissions (Proposed Project and General Plan Buildout Scenario)

Utilizing CalEEMod Version 2022.1.1 construction inputs presented in Table 4.1, construction of the proposed Project is estimated to generate approximately 3,056 MT CO₂e over the construction period. The GP Buildout scenario would result in slightly more GHG emissions at 3,378 MT CO₂e from construction activities. Since construction durations and equipment were essentially the same, the additional emissions in the GP Buildout scenario would be from material deliveries during building construction. The slightly higher emissions are due to CalEEMod estimates on vendor and worker trips to construct the high school.

Because these emissions contribute to long-term cumulative greenhouse gas levels, both totals were annualized over a 30-year project lifetime, consistent with South Coast Air Quality Management District (SCAQMD) recommendations (SCAQMD, 2008). This results in an annualized construction emission of 101.87 MT CO₂e /year for the proposed Project and 112.60 MT CO₂e /year for the GP Buildout scenario. These annualized construction emissions were added to the operational GHG emissions for each respective scenario, as shown in Tables 5.1 and 5.2. The proposed Project results in slightly lower total annual emissions than the GP Buildout scenario, but both are presented using a consistent methodology for comparison.

Table 5.1: Proposed Project - Annual Construction CO₂e Emissions (MT CO₂e/year)

Year	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
2027	2,056	0.08	0.02	2,065
2028	471	0.02	0.02	477
2029	508	0.02	0.02	514
Total				3,056
Yearly Average Construction Emissions (Metric Tons/year over 30 years)				101.87

Table 5.2: GP Buildout - Annual Construction CO₂e Emissions (MT CO₂e/year)

Year	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
2027	2,068	0	0	2,077
2028	621	0	0	632
2029	658	0	0	669
Total				3,378
Yearly Average Construction Emissions (Metric Tons/year over 30 years)				112.6

5.2 Proposed Project Operational Emissions

Once construction is completed the proposed Project would generate GHG emissions from daily operations which would include sources such as area, energy, mobile, solid waste and water uses, which are calculated within CalEEMod. Area Sources include consumer products, landscaping and architectural coatings as part of regular maintenance. Energy sources would be from electricity usage. Solid waste generated in the form of trash is also considered as decomposition of organic material breaks down to form GHGs. Water sources include standard residential uses including landscaping activities.

This analysis is driven by the CAP and since this Project seeks a GP amendment, the proposed Project is analyzed in comparison with the existing land use designation to determine if it would be less intense than what would otherwise be approved under the existing GP. If a project's proposed amendment to the GP results in lower GHG emissions than development under the GP, the project would be required to implement the applicable CAP Measures identified in Step 2 of the CAP Consistency Checklist (San Marcos, 2020).

Proposed Project Findings

Table 5.3 shows that the Project's operational and construction GHG emissions would be 2,549.16 MT CO₂e per year.

Table 5.3: Operational Emissions Summary MT/Year (Proposed Project)

Source	Total CO ₂	CH ₄	N ₂ O	CO ₂ e (MT/Yr)
Mobile	2,217	0.11	0.09	2,249
Area	3.18	< 0.005	< 0.005	3.19
Energy	104	0.02	< 0.005	106
Water	23.6	0.3	0.01	33.2
Waste	16	1.6	0	55.9
Operations Total				2,447.29
Construction Emissions (See Table 5.1 above)				101.87
Project GHG Emissions				2,549.16
Data is presented in decimal format and may have rounding errors. * No Data Provided				

5.3 General Plan Buildout Scenario Construction and Operational Emissions

Table 5.4 indicates the combined operational and construction GHG emissions for the GP Buildout scenario would be as high as 4,055.70 MT CO₂e per year. Mobile emissions comprise the majority of these totals; however, for the high school component, the average daily emission rate was calculated by dividing the annual total of 3,560 MT CO₂e by 365 days (approximately 9.75 MT per day) and then multiplying by 180 school days to reflect a typical academic calendar.

Table 5.4: Operational Emissions Summary MT/Year (GP Buildout Scenario)

Source	Total CO ₂	CH ₄	N ₂ O	CO ₂ e (MT/Yr)
Mobile (Single Family)	987	0.05	0.04	1,001
Mobile (City Park)	460	0.02	0.02	466
Mobile (High School)	3,511	0.16	0.14	3,560
Total from CalEEMod	4,958	0.23	0.20	5,027
Mobile (Single Family)	987	0.05	0.04	1,001
Mobile (City Park)	460	0.02	0.02	466
Mobile (High School) Corrected to 180 Days*	1,731	0.08	0.07	1,756
Mobile (Total Corrected)	3,178	0.15	0.13	3,223
Area	6.1	< 0.005	< 0.005	6.1
Energy	507	0.07	0.01	510
Water	23	0.48	0.01	38
Waste	47	4.7	0	166
Operations Total				3,943.10
Construction Emissions (See Table 5.1 above)				112.60
Project GHG Emissions				4,055.70
Data is presented in decimal format and may have rounding errors. * High school mobile source emissions were adjusted to reflect 180 days of operation per year, rather than 365 days, to account for the academic calendar. This correction was calculated outside of CalEEMod, as the model assumes year-round operation for mobile emissions and does not directly account for school year scheduling.				

Comparison of the Proposed Project and a General Plan Buildout Scenario

When comparing total annual GHG emissions, the proposed Project would result in 2,549.16 MT CO₂e per year, while the GP Buildout scenario would generate 4,055.70 MT CO₂e per year. This reflects a reduction of approximately 37.2 percent in total annual emissions under the proposed Project relative to the GP Buildout scenario.

5.4 CEQA Compliance

SB 97 directed amendments to the CEQA statute to specifically establish that GHG emissions and their impacts are appropriate subjects for CEQA analysis. Under SB 97 the project should be able to answer the following questions for CEQA compliance.

1. Will the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The City is committed to reducing its GHG emissions consistent with SB 32. Based on this requirement, the City's CAP concludes that proposed GP amendments would be consistent with the CAP so long as the GHG emissions generated by the amendment are less than would otherwise be produced by a consistent GP Buildout scenario.

The proposed Project was found to emit 2,549.16 MT CO₂e per year and the GP Buildout scenario was estimated to generate at least 4,055.70 MT CO₂e per year. The Project would therefore have a less intense carbon footprint by an estimated 37.2 percent when compared to what could otherwise be assumed as allowed under the City's GP. Given this, the Project as proposed would be less than significant in terms of GHG intensity. In addition, it should be noted, the project would be required to implement CAP measures applicable to the project and are discussed further in Section 5.5 below. Based on the fact the Project will be both less intense in terms of GHG emissions and would be required to be consistent with the CAP, a less than significant impact would be expected on the environment with respect to GHG emissions from the project.

2. Will the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The proposed Project was found to emit 2,549.16 MT CO₂e per year and the GP Buildout scenario as analyzed would generate at least 4,055.70 MT CO₂e per year. The Project would therefore result in a less intense carbon footprint by 37.2 percent when compared to what could otherwise be assumed in the City's GP. CAP consistency can be assumed as long as the amendment results in an equivalent or less GHG-intensive project when compared to the existing land use designation. In addition to providing evidence to support the conclusion that the project would generate fewer emissions than existing designations, the project would demonstrate consistency with the CAP through completion of Step 2 of the CAP Consistency Checklist. Based on this, a less than significant impact would be expected by the project through the implementation of CAP measures by the Project. A general breakdown of what will be required is shown below in Section 5.5.

5.5 Project Specific Requirements (CAP and Title 24)

CAP Requirements Residential:

The applicable CAP and Title 24 measures specific to the Project are listed below:

1. Electric Vehicle Charging (Measure T-2):

Multi-Family: Install Level 2 (or better) EV charging stations in at least 5% of total on-site common parking spaces.

2. Bicycle Infrastructure (Measure T-8):

The proposed Project must construct the bicycle infrastructure improvements as part of the project along Twin Oaks Valley Road at the proposed Project frontage.

3. Transportation Demand Management (Measure T-9):

Prepare and implement a TDM Plan per Chapter 20.350 of the Municipal Code and TDM Policy.

4. Water Heaters (Measure E-1):

Install electric heat pump water heaters (or other non-gas alternatives) in residential units.

5. Landscaping Water Use (Measure W-1):

Comply with the City's Water Efficient Landscape Ordinance

6. Urban Tree Canopy (Measure C-2):

Plant at least one tree per five parking spaces for multi-family projects and at least one tree per single family dwelling unit.

Title 24 Requirements:

The project is subject to the latest California Energy Code (Title 24, Part 6) and CALGreen (Part 11), which establish mandatory measures for energy efficiency, clean energy integration, and electric vehicle readiness in new residential development. These are beyond the City's CAP. The applicable requirements include:

1. Solar PV Installation:

Multi-Family: A solar photovoltaic (PV) system is required based on the total conditioned floor area and number of units. The exact sizing would be established when the total building floor area and conditioned floor area is known.

Single-Family: A PV system is required for single family structures and is based on the individual home's building characteristics and climate zone. The exact sizing would be established at the time building permits are requested.

2. Electric Vehicle Charging Infrastructure:

Single-Family: Each unit with a private garage must include a dedicated 240V 40-amp circuit and conduit to allow installation of a future Level 2 EV charger (EV-capable).

3. Energy Efficiency Standards:

The project must meet all applicable energy performance requirements, including high-efficiency lighting, insulation, HVAC systems, and appliances. Compliance is verified through energy modeling and documentation submitted with the building permit application.

6.0 REFERENCES

- Ascent. (2020). CAP Consistency Guidance Memo.
- California Air Resources Board. (2012). *www.arb.ca.gov*. Retrieved from California Air Resources Board Approves Advanced Clean Car Rules:
<https://ww2.arb.ca.gov/news/california-air-resources-board-approves-advanced-clean-car-rules>
- California Title 24, Part 11. (2022). Retrieved from
<https://www.dgs.ca.gov/BSC/Resources/2022-Title-24-California-Code-Changes>
- CalRecycle. (2016). *California's Short-Lived Climate Pollutant Reduction Strategy*. Retrieved from <https://calrecycle.ca.gov/organics/slcp/#>
- CalRecycle. (2020). <https://www.calrecycle.ca.gov>. Retrieved from <https://www.calrecycle.ca.gov/Climate/>
- CARB. (2017). *California's 2017 Climate Change Scoping Plan*. Retrieved from https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf
- CARB. (2017). *Clean Car Standards - Pavley, Assembly Bill 1493*. Retrieved from <https://www.arb.ca.gov/cc/ccms/ccms.htm>
- CARB. (2017). *The Advanced Clean Cars Program*. Retrieved from https://www.arb.ca.gov/msprog/acc/acc_conceptdraft.htm
- CARB. (2018). <https://ww2.arb.ca.gov>. Retrieved 2021, from <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>:
<https://ww2.arb.ca.gov>
- CARB. (2018). ww2.arb.ca.gov. Retrieved 2021, from <https://ww2.arb.ca.gov/resources/documents/lcfs-basics>:
<https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/about>
- CARB. (2022). *2022 Scoping Plan for Achieving Carbon Neutrality*. Retrieved from <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf>
- CARB. (2023). <https://ww2.arb.ca.gov>. Retrieved from Advanced Clean Cars Program:
<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>
- CARB. (2023). <https://ww2.arb.ca.gov>. Retrieved from California moves to accelerate to 100% new zero-emission vehicle sales by 2035:
<https://ww2.arb.ca.gov/news/california-moves-accelerate-100-new-zero-emission-vehicle-sales-2035#:~:text=General%20requirements,and%20reach%20100%25%20in%202035.>
- City of San Marcos. (2020). *Appendix D - Guidance to Demonstrating Consistency with the City of San Marcos Climate Action Plan for Discretionary Projects Subject to CEQA and City of San Marcos Climate Action Plan Consistency Review Checklist*. Retrieved from <https://www.san-marcos.net/home/showpublisheddocument?id=25086>
- City of San Marcos. (2020). *Final Climate Action Plan*. Retrieved from <https://www.san-marcos.net/home/showpublisheddocument/25084/637435406644270000>

- EPA. (2023). *https://www.epa.gov*. Retrieved from Greenhouse Gases:
<https://www.epa.gov/report-environment/greenhouse-gases>
- Excel Engineering. (2025). *Oakcrest Development*.
- Google. (2025). Retrieved 2025, from maps.google.com
- Google Earth Pro. (2021).
- IPCC. (2007). *IPCC Fourth Assessment Report: Climate Change 2007 : Working Group I: The Physical Science Basis*. Retrieved from
https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html
- LL&G Engineers. (2025). *LOCAL TRANSPORTATION ANALYSIS - Oak Crest Specific Plan*.
- San Marcos. (2020). CAP Appendix B - Methods for Estimating Greenhouse Gas Emissions Reductions in the San Marcos Climate Action Plan.
- SANDAG. (2002). *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*.
- SANDAG. (2021). *2021 Regional Plan*. Retrieved from <https://www.sandag.org/-/media/SANDAG/Documents/PDF/regional-plan/2021-regional-plan/final-2021-regional-plan/final-2021-regional-plan-flipbook.pdf>
- SCAQMD. (2008). Retrieved 2018, from [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf)
- State of California. (2022). *Assembly Bill No. 1279*. Retrieved from
https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279
- State of California. (2022). *Senate Bill No. 1020*. Retrieved from
https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1020
- USEPA. (2023). *Understanding Global Warming Potentials*. Retrieved from
<https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>
- WRCC. (2018). Retrieved from
https://wrcc.dri.edu/Climate/comp_table_show.php?stype=wind_dir_avg
- WRCC. (2021). Retrieved from <https://wrcc.dri.edu/summary/Climsmsca.html>:
<https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca2862>

ATTACHMENT A

CalEEMod Emission Model – Proposed Project

Oak Crest Detailed Report

Table of Contents

1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.3. Construction Emissions by Year, Mitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
 - 2.6. Operations Emissions by Sector, Mitigated
3. Construction Emissions Details
 - 3.1. Demolition (2027) - Unmitigated
 - 3.2. Demolition (2027) - Mitigated
 - 3.3. Site Preparation (2027) - Unmitigated

3.4. Site Preparation (2027) - Mitigated

3.5. Grading (2027) - Unmitigated

3.6. Grading (2027) - Mitigated

3.7. Building Construction (2027) - Unmitigated

3.8. Building Construction (2027) - Mitigated

3.9. Building Construction (2028) - Unmitigated

3.10. Building Construction (2028) - Mitigated

3.11. Building Construction (2029) - Unmitigated

3.12. Building Construction (2029) - Mitigated

3.13. Paving (2029) - Unmitigated

3.14. Paving (2029) - Mitigated

3.15. Architectural Coating (2029) - Unmitigated

3.16. Architectural Coating (2029) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Oak Crest
Construction Start Date	1/1/2027
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	20.8
Location	33.16131403374409, -117.16634716646988
County	San Diego
City	San Marcos
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6215
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.30

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
Single Family Housing	145	Dwelling Unit	47.1	282,750	1,698,364	—	405	—

City Park	6.00	Acre	6.00	0.00	200,000	200,000	—	—
Condo/Townhouse	112	Dwelling Unit	15.0	118,720	80,000	—	312	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-6	Use Diesel Particulate Filters
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.4	39.9	140	0.20	1.61	9.51	11.1	1.47	3.73	5.20	—	23,072	23,072	0.88	0.25	23,171
Mit.	24.4	39.9	140	0.20	0.25	9.51	9.75	0.22	3.73	3.95	—	23,072	23,072	0.88	0.25	23,171
% Reduced	—	—	—	—	85%	—	12%	85%	—	24%	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.8	40.0	140	0.20	1.61	19.8	20.7	1.47	10.1	11.0	—	23,059	23,059	0.89	0.25	23,157
Mit.	24.8	40.0	140	0.20	0.25	19.8	19.9	0.22	10.1	10.3	—	23,059	23,059	0.89	0.25	23,157
% Reduced	—	—	—	—	85%	—	4%	85%	—	7%	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	7.66	24.0	74.5	0.11	0.97	6.97	7.94	0.88	2.97	3.85	—	12,416	12,416	0.48	0.15	12,472
Mit.	7.66	24.0	74.5	0.11	0.15	6.97	7.12	0.13	2.97	3.11	—	12,416	12,416	0.48	0.15	12,472
% Reduced	—	—	—	—	85%	—	10%	85%	—	19%	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.40	4.38	13.6	0.02	0.18	1.27	1.45	0.16	0.54	0.70	—	2,056	2,056	0.08	0.02	2,065
Mit.	1.40	4.38	13.6	0.02	0.03	1.27	1.30	0.02	0.54	0.57	—	2,056	2,056	0.08	0.02	2,065
% Reduced	—	—	—	—	85%	—	10%	85%	—	19%	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.71	39.9	140	0.20	1.61	9.51	11.1	1.47	3.73	5.20	—	23,072	23,072	0.88	0.25	23,171
2028	0.85	11.7	19.0	0.03	0.43	1.30	1.73	0.39	0.31	0.70	—	4,026	4,026	0.13	0.15	4,081
2029	24.4	11.7	19.7	0.03	0.43	1.52	1.95	0.38	0.36	0.75	—	4,221	4,221	0.13	0.16	4,277
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.70	40.0	140	0.20	1.61	19.8	20.7	1.47	10.1	11.0	—	23,059	23,059	0.89	0.25	23,157
2028	0.84	11.8	18.4	0.03	0.43	1.30	1.73	0.39	0.31	0.70	—	3,961	3,961	0.14	0.15	4,010
2029	24.8	20.5	30.0	0.04	0.82	1.65	2.47	0.74	0.39	1.14	—	5,779	5,779	0.21	0.18	5,837
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.53	24.0	74.5	0.11	0.97	6.97	7.94	0.88	2.97	3.85	—	12,416	12,416	0.48	0.15	12,472
2028	0.60	8.46	13.2	0.02	0.31	0.92	1.23	0.28	0.22	0.50	—	2,844	2,844	0.10	0.11	2,881
2029	7.66	9.42	14.5	0.02	0.35	1.00	1.35	0.32	0.24	0.56	—	3,068	3,068	0.10	0.11	3,106

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.28	4.38	13.6	0.02	0.18	1.27	1.45	0.16	0.54	0.70	—	2,056	2,056	0.08	0.02	2,065
2028	0.11	1.54	2.41	< 0.005	0.06	0.17	0.22	0.05	0.04	0.09	—	471	471	0.02	0.02	477
2029	1.40	1.72	2.65	< 0.005	0.06	0.18	0.25	0.06	0.04	0.10	—	508	508	0.02	0.02	514

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.71	39.9	140	0.20	0.25	9.51	9.75	0.22	3.73	3.95	—	23,072	23,072	0.88	0.25	23,171
2028	0.85	11.7	19.0	0.03	0.07	1.30	1.37	0.07	0.31	0.38	—	4,026	4,026	0.13	0.15	4,081
2029	24.4	11.7	19.7	0.03	0.07	1.52	1.37	0.06	0.36	0.37	—	4,221	4,221	0.13	0.16	4,277
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.70	40.0	140	0.20	0.25	19.8	19.9	0.22	10.1	10.3	—	23,059	23,059	0.89	0.25	23,157
2028	0.84	11.8	18.4	0.03	0.07	1.30	1.37	0.07	0.31	0.38	—	3,961	3,961	0.14	0.15	4,010
2029	24.8	20.5	30.0	0.04	0.07	1.65	1.37	0.06	0.39	0.37	—	5,779	5,779	0.21	0.18	5,837
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.53	24.0	74.5	0.11	0.15	6.97	7.12	0.13	2.97	3.11	—	12,416	12,416	0.48	0.15	12,472
2028	0.60	8.46	13.2	0.02	0.05	0.92	0.97	0.05	0.22	0.27	—	2,844	2,844	0.10	0.11	2,881
2029	7.66	9.42	14.5	0.02	NaN	1.00	NaN	NaN	0.24	NaN	—	3,068	3,068	0.10	0.11	3,106
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.28	4.38	13.6	0.02	0.03	1.27	1.30	0.02	0.54	0.57	—	2,056	2,056	0.08	0.02	2,065
2028	0.11	1.54	2.41	< 0.005	0.01	0.17	0.18	0.01	0.04	0.05	—	471	471	0.02	0.02	477
2029	1.40	1.72	2.65	< 0.005	NaN	0.18	NaN	NaN	0.04	NaN	—	508	508	0.02	0.02	514

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.8	6.52	68.9	0.15	0.23	12.8	13.0	0.22	3.25	3.47	114	16,767	16,881	12.4	0.59	17,401
Mit.	18.7	4.89	68.2	0.14	0.10	12.8	12.9	0.09	3.25	3.34	114	14,706	14,820	12.2	0.59	15,334
% Reduced	1%	25%	1%	7%	57%	—	1%	59%	—	4%	—	12%	12%	1%	1%	12%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.4	6.85	51.6	0.14	0.22	12.8	13.0	0.22	3.25	3.46	114	16,114	16,227	12.4	0.62	16,728
Mit.	17.3	5.23	50.9	0.13	0.09	12.8	12.9	0.09	3.25	3.33	114	14,053	14,166	12.2	0.62	14,661
% Reduced	1%	24%	1%	7%	59%	—	1%	61%	—	4%	—	13%	13%	1%	1%	12%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.9	6.84	58.7	0.14	0.23	12.6	12.9	0.22	3.20	3.42	114	16,226	16,339	12.4	0.62	16,850
Mit.	17.8	5.22	58.0	0.13	0.09	12.6	12.7	0.09	3.20	3.29	114	14,165	14,278	12.2	0.61	14,783
% Reduced	1%	24%	1%	7%	58%	—	1%	60%	—	4%	—	13%	13%	1%	1%	12%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.27	1.25	10.7	0.03	0.04	2.30	2.35	0.04	0.58	0.62	18.9	2,686	2,705	2.06	0.10	2,790
Mit.	3.26	0.95	10.6	0.02	0.02	2.30	2.32	0.02	0.58	0.60	18.9	2,345	2,364	2.03	0.10	2,448
% Reduced	1%	24%	1%	7%	58%	—	1%	60%	—	4%	—	13%	13%	1%	1%	12%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.83	4.76	53.6	0.14	0.09	12.8	12.9	0.09	3.25	3.33	—	13,911	13,911	0.63	0.53	14,115
Area	10.9	0.14	14.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	39.0	39.0	< 0.005	< 0.005	39.1
Energy	0.10	1.63	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,692	2,692	0.30	0.02	2,705
Water	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Waste	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Total	18.8	6.52	68.9	0.15	0.23	12.8	13.0	0.22	3.25	3.47	114	16,767	16,881	12.4	0.59	17,401
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.70	5.23	50.9	0.13	0.09	12.8	12.9	0.09	3.25	3.33	—	13,296	13,296	0.67	0.56	13,481
Area	9.62	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.10	1.63	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,692	2,692	0.30	0.02	2,705
Water	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Waste	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Total	17.4	6.85	51.6	0.14	0.22	12.8	13.0	0.22	3.25	3.46	114	16,114	16,227	12.4	0.62	16,728
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.60	5.15	50.8	0.13	0.09	12.6	12.7	0.09	3.20	3.29	—	13,389	13,389	0.66	0.55	13,584
Area	10.2	0.07	7.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	19.2	19.2	< 0.005	< 0.005	19.3
Energy	0.10	1.63	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,692	2,692	0.30	0.02	2,705
Water	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Waste	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Total	17.9	6.84	58.7	0.14	0.23	12.6	12.9	0.22	3.20	3.42	114	16,226	16,339	12.4	0.62	16,850
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.39	0.94	9.27	0.02	0.02	2.30	2.32	0.02	0.58	0.60	—	2,217	2,217	0.11	0.09	2,249
Area	1.87	0.01	1.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.18	3.18	< 0.005	< 0.005	3.19
Energy	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	446	446	0.05	< 0.005	448
Water	—	—	—	—	—	—	—	—	—	—	2.86	20.7	23.6	0.30	0.01	33.2
Waste	—	—	—	—	—	—	—	—	—	—	16.0	0.00	16.0	1.60	0.00	55.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48
Total	3.27	1.25	10.7	0.03	0.04	2.30	2.35	0.04	0.58	0.62	18.9	2,686	2,705	2.06	0.10	2,790

2.6. Operations Emissions by Sector, Mitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.83	4.76	53.6	0.14	0.09	12.8	12.9	0.09	3.25	3.33	—	13,911	13,911	0.63	0.53	14,115
Area	10.9	0.14	14.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	39.0	39.0	< 0.005	< 0.005	39.1
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	631	631	0.12	0.01	639
Water	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Waste	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Total	18.7	4.89	68.2	0.14	0.10	12.8	12.9	0.09	3.25	3.34	114	14,706	14,820	12.2	0.59	15,334
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.70	5.23	50.9	0.13	0.09	12.8	12.9	0.09	3.25	3.33	—	13,296	13,296	0.67	0.56	13,481
Area	9.62	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	631	631	0.12	0.01	639
Water	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Waste	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Total	17.3	5.23	50.9	0.13	0.09	12.8	12.9	0.09	3.25	3.33	114	14,053	14,166	12.2	0.62	14,661
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.60	5.15	50.8	0.13	0.09	12.6	12.7	0.09	3.20	3.29	—	13,389	13,389	0.66	0.55	13,584
Area	10.2	0.07	7.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	19.2	19.2	< 0.005	< 0.005	19.3
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	631	631	0.12	0.01	639
Water	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Waste	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Total	17.8	5.22	58.0	0.13	0.09	12.6	12.7	0.09	3.20	3.29	114	14,165	14,278	12.2	0.61	14,783
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.39	0.94	9.27	0.02	0.02	2.30	2.32	0.02	0.58	0.60	—	2,217	2,217	0.11	0.09	2,249
Area	1.87	0.01	1.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.18	3.18	< 0.005	< 0.005	3.19
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	104	104	0.02	< 0.005	106
Water	—	—	—	—	—	—	—	—	—	—	2.86	20.7	23.6	0.30	0.01	33.2
Waste	—	—	—	—	—	—	—	—	—	—	16.0	0.00	16.0	1.60	0.00	55.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48
Total	3.26	0.95	10.6	0.02	0.02	2.30	2.32	0.02	0.58	0.60	18.9	2,345	2,364	2.03	0.10	2,448

3. Construction Emissions Details

3.1. Demolition (2027) - Unmitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	17.3	18.2	0.03	0.79	—	0.79	0.71	—	0.71	—	3,427	3,427	0.14	0.03	3,439
Demolition	—	—	—	—	—	0.54	0.54	—	0.08	0.08	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.95	1.00	< 0.005	0.04	—	0.04	0.04	—	0.04	—	188	188	0.01	< 0.005	188
Demolition	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	31.2
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.05	0.54	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	0.01	0.01	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.57	0.22	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	436	436	0.02	0.07	457
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.16	7.16	< 0.005	< 0.005	7.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.9	23.9	< 0.005	< 0.005	25.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.18	1.18	< 0.005	< 0.005	1.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.96	3.96	< 0.005	< 0.005	4.15

3.2. Demolition (2027) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	17.3	18.2	0.03	0.12	—	0.12	0.11	—	0.11	—	3,427	3,427	0.14	0.03	3,439
Demolition	—	—	—	—	—	0.54	0.54	—	0.08	0.08	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.95	1.00	< 0.005	0.01	—	0.01	0.01	—	0.01	—	188	188	0.01	< 0.005	188
Demolition	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.1	31.1	< 0.005	< 0.005	31.2
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.54	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	0.01	0.01	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.57	0.22	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	436	436	0.02	0.07	457
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.16	7.16	< 0.005	< 0.005	7.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.9	23.9	< 0.005	< 0.005	25.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.18	1.18	< 0.005	< 0.005	1.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.96	3.96	< 0.005	< 0.005	4.15

3.3. Site Preparation (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	24.0	28.3	0.05	0.94	—	0.94	0.84	—	0.84	—	5,298	5,298	0.21	0.04	5,316
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	2.63	3.10	0.01	0.10	—	0.10	0.09	—	0.09	—	581	581	0.02	< 0.005	583
Dust From Material Movement	—	—	—	—	—	2.15	2.15	—	1.11	1.11	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.48	0.57	< 0.005	0.02	—	0.02	0.02	—	0.02	—	96.1	96.1	< 0.005	< 0.005	96.5
Dust From Material Movement	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	151	151	0.01	0.01	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.7	16.7	< 0.005	< 0.005	16.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.76	2.76	< 0.005	< 0.005	2.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.4. Site Preparation (2027) - Mitigated

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

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

Off-Road Equipment	0.90	24.0	28.3	0.05	0.14	—	0.14	0.13	—	0.13	—	5,298	5,298	0.21	0.04	5,316
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	2.63	3.10	0.01	0.02	—	0.02	0.01	—	0.01	—	581	581	0.02	< 0.005	583
Dust From Material Movement	—	—	—	—	—	2.15	2.15	—	1.11	1.11	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.48	0.57	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	96.1	96.1	< 0.005	< 0.005	96.5
Dust From Material Movement	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	151	151	0.01	0.01	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.7	16.7	< 0.005	< 0.005	16.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.76	2.76	< 0.005	< 0.005	2.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.5. Grading (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.61	39.5	139	0.20	1.60	—	1.60	1.47	—	1.47	—	22,509	22,509	0.86	0.19	22,588
Dust From Material Movement	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.61	39.5	139	0.20	1.60	—	1.60	1.47	—	1.47	—	22,509	22,509	0.86	0.19	22,588

Dust From Material Movement	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.29	19.5	68.6	0.10	0.79	—	0.79	0.72	—	0.72	—	11,100	11,100	0.42	0.10	11,139
Dust From Material Movement	—	—	—	—	—	4.54	4.54	—	1.80	1.80	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	3.55	12.5	0.02	0.14	—	0.14	0.13	—	0.13	—	1,838	1,838	0.07	0.02	1,844
Dust From Material Movement	—	—	—	—	—	0.83	0.83	—	0.33	0.33	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.02	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	228	228	0.01	0.01	232
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.42	0.16	< 0.005	0.01	0.09	0.10	< 0.005	0.02	0.03	—	334	334	0.02	0.05	351
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.08	0.90	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	216	216	0.01	0.01	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.44	0.17	< 0.005	0.01	0.09	0.10	< 0.005	0.02	0.03	—	334	334	0.02	0.05	350
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.45	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	107	107	0.01	< 0.005	109
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.22	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	165	165	0.01	0.03	173
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	18.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.3	27.3	< 0.005	< 0.005	28.6

3.6. Grading (2027) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.61	39.5	139	0.20	0.24	—	0.24	0.22	—	0.22	—	22,509	22,509	0.86	0.19	22,588
Dust From Material Movement	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.61	39.5	139	0.20	0.24	—	0.24	0.22	—	0.22	—	22,509	22,509	0.86	0.19	22,588
Dust From Material Movement	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.29	19.5	68.6	0.10	0.12	—	0.12	0.11	—	0.11	—	11,100	11,100	0.42	0.10	11,139
Dust From Material Movement	—	—	—	—	—	4.54	4.54	—	1.80	1.80	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	3.55	12.5	0.02	0.02	—	0.02	0.02	—	0.02	—	1,838	1,838	0.07	0.02	1,844
Dust From Material Movement	—	—	—	—	—	0.83	0.83	—	0.33	0.33	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.02	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	228	228	0.01	0.01	232
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.42	0.16	< 0.005	0.01	0.09	0.10	< 0.005	0.02	0.03	—	334	334	0.02	0.05	351

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.90	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	216	216	0.01	0.01	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.44	0.17	< 0.005	0.01	0.09	0.10	< 0.005	0.02	0.03	—	334	334	0.02	0.05	350
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.45	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	107	107	0.01	< 0.005	109
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.22	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	165	165	0.01	0.03	173
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	18.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.3	27.3	< 0.005	< 0.005	28.6

3.7. Building Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	10.6	13.5	0.02	0.42	—	0.42	0.38	—	0.38	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.60	0.77	< 0.005	0.02	—	0.02	0.02	—	0.02	—	124	124	0.01	< 0.005	125
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.6	20.6	< 0.005	< 0.005	20.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.41	4.78	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,146	1,146	0.06	0.05	1,162
Vendor	0.02	0.86	0.40	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	661	661	0.03	0.09	689
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	65.6	65.6	< 0.005	< 0.005	66.6
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.5	37.5	< 0.005	0.01	39.1
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	11.0
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.21	6.21	< 0.005	< 0.005	6.48
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

3.8. Building Construction (2027) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	10.6	13.5	0.02	0.06	—	0.06	0.06	—	0.06	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.60	0.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	124	124	0.01	< 0.005	125
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.6	20.6	< 0.005	< 0.005	20.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.41	4.78	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,146	1,146	0.06	0.05	1,162
Vendor	0.02	0.86	0.40	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	661	661	0.03	0.09	689
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	65.6	65.6	< 0.005	< 0.005	66.6
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.5	37.5	< 0.005	0.01	39.1
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	11.0
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.21	6.21	< 0.005	< 0.005	6.48
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

3.9. Building Construction (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	10.6	13.5	0.02	0.42	—	0.42	0.38	—	0.38	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	10.6	13.5	0.02	0.42	—	0.42	0.38	—	0.38	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	7.61	9.66	0.01	0.30	—	0.30	0.27	—	0.27	—	1,569	1,569	0.06	0.01	1,574

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.39	1.76	< 0.005	0.06	—	0.06	0.05	—	0.05	—	260	260	0.01	< 0.005	261
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.32	5.15	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,192	1,192	0.02	0.04	1,209
Vendor	0.02	0.79	0.38	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	644	644	0.02	0.09	673
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.37	4.51	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,126	1,126	0.02	0.04	1,140
Vendor	0.02	0.82	0.39	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	644	644	0.02	0.09	673
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.26	3.27	0.00	0.00	0.79	0.79	0.00	0.19	0.19	—	814	814	0.02	0.03	825
Vendor	0.02	0.58	0.27	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	461	461	0.02	0.07	482
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.60	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	135	135	< 0.005	0.01	137
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	76.4	76.4	< 0.005	0.01	79.8
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

3.10. Building Construction (2028) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	10.6	13.5	0.02	0.06	—	0.06	0.06	—	0.06	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	10.6	13.5	0.02	0.06	—	0.06	0.06	—	0.06	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	7.61	9.66	0.01	0.05	—	0.05	0.04	—	0.04	—	1,569	1,569	0.06	0.01	1,574
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.39	1.76	< 0.005	0.01	—	0.01	0.01	—	0.01	—	260	260	0.01	< 0.005	261
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.32	5.15	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,192	1,192	0.02	0.04	1,209
Vendor	0.02	0.79	0.38	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	644	644	0.02	0.09	673

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.37	4.51	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,126	1,126	0.02	0.04	1,140
Vendor	0.02	0.82	0.39	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	644	644	0.02	0.09	673
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.26	3.27	0.00	0.00	0.79	0.79	0.00	0.19	0.19	—	814	814	0.02	0.03	825
Vendor	0.02	0.58	0.27	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	461	461	0.02	0.07	482
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.60	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	135	135	< 0.005	0.01	137
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	76.4	76.4	< 0.005	0.01	79.8
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

3.11. Building Construction (2029) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	10.6	13.5	0.02	0.42	—	0.42	0.38	—	0.38	—	2,189	2,189	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.37	10.6	13.5	0.02	0.42	—	0.42	0.38	—	0.38	—	2,189	2,189	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	7.59	9.63	0.01	0.30	—	0.30	0.27	—	0.27	—	1,564	1,564	0.06	0.01	1,569
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.39	1.76	< 0.005	0.05	—	0.05	0.05	—	0.05	—	259	259	0.01	< 0.005	260
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.29	4.86	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,172	1,172	0.02	0.04	1,189
Vendor	0.02	0.75	0.37	< 0.005	0.01	0.18	0.19	< 0.005	0.05	0.05	—	626	626	0.02	0.09	654
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.33	4.24	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,107	1,107	0.02	0.04	1,121
Vendor	0.02	0.78	0.37	< 0.005	0.01	0.18	0.19	< 0.005	0.05	0.05	—	626	626	0.02	0.09	653
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.23	3.07	0.00	0.00	0.79	0.79	0.00	0.19	0.19	—	798	798	0.01	0.03	808
Vendor	0.02	0.56	0.27	< 0.005	0.01	0.12	0.13	< 0.005	0.03	0.04	—	447	447	0.02	0.06	466
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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.56	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	132	132	< 0.005	0.01	134
Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	74.0	74.0	< 0.005	0.01	77.2
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

3.12. Building Construction (2029) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	10.6	13.5	0.02	0.06	—	0.06	0.06	—	0.06	—	2,189	2,189	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	10.6	13.5	0.02	0.06	—	0.06	0.06	—	0.06	—	2,189	2,189	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	7.59	9.63	0.01	0.05	—	0.05	0.04	—	0.04	—	1,564	1,564	0.06	0.01	1,569
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.39	1.76	< 0.005	0.01	—	0.01	0.01	—	0.01	—	259	259	0.01	< 0.005	260

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.29	4.86	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,172	1,172	0.02	0.04	1,189
Vendor	0.02	0.75	0.37	< 0.005	0.01	0.18	0.19	< 0.005	0.05	0.05	—	626	626	0.02	0.09	654
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.33	4.24	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,107	1,107	0.02	0.04	1,121
Vendor	0.02	0.78	0.37	< 0.005	0.01	0.18	0.19	< 0.005	0.05	0.05	—	626	626	0.02	0.09	653
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.23	3.07	0.00	0.00	0.79	0.79	0.00	0.19	0.19	—	798	798	0.01	0.03	808
Vendor	0.02	0.56	0.27	< 0.005	0.01	0.12	0.13	< 0.005	0.03	0.04	—	447	447	0.02	0.06	466
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.56	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	132	132	< 0.005	0.01	134
Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	74.0	74.0	< 0.005	0.01	77.2
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

3.13. Paving (2029) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	8.62	10.6	0.01	0.39	—	0.39	0.36	—	0.36	—	1,511	1,511	0.06	0.01	1,516
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.02	1.25	< 0.005	0.05	—	0.05	0.04	—	0.04	—	178	178	0.01	< 0.005	179
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.19	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.5	29.5	< 0.005	< 0.005	29.6
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	15.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.46	2.46	< 0.005	< 0.005	2.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.14. Paving (2029) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	8.62	10.6	0.01	0.06	—	0.06	0.05	—	0.05	—	1,511	1,511	0.06	0.01	1,516
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.02	1.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	179
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.19	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.5	29.5	< 0.005	< 0.005	29.6
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	15.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.46	2.46	< 0.005	< 0.005	2.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.15. Architectural Coating (2029) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	23.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	23.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	7.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	1.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	0.97	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	234	234	< 0.005	0.01	238
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.85	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	221	221	< 0.005	0.01	224
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.7	66.7	< 0.005	< 0.005	67.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.16. Architectural Coating (2029) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	23.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	23.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	7.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	1.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	0.97	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	234	234	< 0.005	0.01	238
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.85	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	221	221	< 0.005	0.01	224
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.7	66.7	< 0.005	< 0.005	67.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.74	2.88	32.4	0.08	0.06	7.73	7.79	0.05	1.96	2.01	—	8,407	8,407	0.38	0.32	8,531
City Park	0.16	0.10	1.16	< 0.005	< 0.005	0.28	0.29	< 0.005	0.07	0.07	—	308	308	0.01	0.01	313
Condo/Townhouse	2.93	1.78	20.0	0.05	0.03	4.78	4.81	0.03	1.21	1.24	—	5,195	5,195	0.24	0.20	5,271
Total	7.83	4.76	53.6	0.14	0.09	12.8	12.9	0.09	3.25	3.33	—	13,911	13,911	0.63	0.53	14,115
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.67	3.16	30.8	0.08	0.06	7.73	7.79	0.05	1.96	2.01	—	8,036	8,036	0.41	0.34	8,148
City Park	0.16	0.11	1.09	< 0.005	< 0.005	0.28	0.29	< 0.005	0.07	0.07	—	295	295	0.01	0.01	299
Condo/Townhouse	2.88	1.95	19.0	0.05	0.03	4.78	4.81	0.03	1.21	1.24	—	4,966	4,966	0.25	0.21	5,035
Total	7.70	5.23	50.9	0.13	0.09	12.8	12.9	0.09	3.25	3.33	—	13,296	13,296	0.67	0.56	13,481
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.84	0.57	5.60	0.01	0.01	1.39	1.40	0.01	0.35	0.36	—	1,340	1,340	0.07	0.06	1,359
City Park	0.03	0.02	0.20	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	49.1	49.1	< 0.005	< 0.005	49.8
Condo/Townhouse	0.52	0.35	3.46	0.01	0.01	0.86	0.87	0.01	0.22	0.22	—	828	828	0.04	0.03	840
Total	1.39	0.94	9.27	0.02	0.02	2.30	2.32	0.02	0.58	0.60	—	2,217	2,217	0.11	0.09	2,249

4.1.2. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.74	2.88	32.4	0.08	0.06	7.73	7.79	0.05	1.96	2.01	—	8,407	8,407	0.38	0.32	8,531
City Park	0.16	0.10	1.16	< 0.005	< 0.005	0.28	0.29	< 0.005	0.07	0.07	—	308	308	0.01	0.01	313
Condo/Townhouse	2.93	1.78	20.0	0.05	0.03	4.78	4.81	0.03	1.21	1.24	—	5,195	5,195	0.24	0.20	5,271
Total	7.83	4.76	53.6	0.14	0.09	12.8	12.9	0.09	3.25	3.33	—	13,911	13,911	0.63	0.53	14,115
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.67	3.16	30.8	0.08	0.06	7.73	7.79	0.05	1.96	2.01	—	8,036	8,036	0.41	0.34	8,148
City Park	0.16	0.11	1.09	< 0.005	< 0.005	0.28	0.29	< 0.005	0.07	0.07	—	295	295	0.01	0.01	299
Condo/Townhouse	2.88	1.95	19.0	0.05	0.03	4.78	4.81	0.03	1.21	1.24	—	4,966	4,966	0.25	0.21	5,035
Total	7.70	5.23	50.9	0.13	0.09	12.8	12.9	0.09	3.25	3.33	—	13,296	13,296	0.67	0.56	13,481
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.84	0.57	5.60	0.01	0.01	1.39	1.40	0.01	0.35	0.36	—	1,340	1,340	0.07	0.06	1,359
City Park	0.03	0.02	0.20	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	49.1	49.1	< 0.005	< 0.005	49.8
Condo/Townhouse	0.52	0.35	3.46	0.01	0.01	0.86	0.87	0.01	0.22	0.22	—	828	828	0.04	0.03	840
Total	1.39	0.94	9.27	0.02	0.02	2.30	2.32	0.02	0.58	0.60	—	2,217	2,217	0.11	0.09	2,249

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	414	414	0.08	0.01	419
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	215	215	0.04	0.01	217
Total	—	—	—	—	—	—	—	—	—	—	—	629	629	0.12	0.01	636
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	414	414	0.08	0.01	419
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	215	215	0.04	0.01	217
Total	—	—	—	—	—	—	—	—	—	—	—	629	629	0.12	0.01	636
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	68.5	68.5	0.01	< 0.005	69.3
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	35.6	35.6	0.01	< 0.005	36.0
Total	—	—	—	—	—	—	—	—	—	—	—	104	104	0.02	< 0.005	105

4.2.2. Electricity Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	415	415	0.08	0.01	420
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	216	216	0.04	0.01	218
Total	—	—	—	—	—	—	—	—	—	—	—	631	631	0.12	0.01	639
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	415	415	0.08	0.01	420
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	216	216	0.04	0.01	218
Total	—	—	—	—	—	—	—	—	—	—	—	631	631	0.12	0.01	639
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	68.8	68.8	0.01	< 0.005	69.6
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	35.7	35.7	0.01	< 0.005	36.2
Total	—	—	—	—	—	—	—	—	—	—	—	104	104	0.02	< 0.005	106

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.06	1.04	0.44	0.01	0.08	—	0.08	0.08	—	0.08	—	1,325	1,325	0.12	< 0.005	1,329
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	0.03	0.58	0.25	< 0.005	0.05	—	0.05	0.05	—	0.05	—	738	738	0.07	< 0.005	740
Total	0.10	1.63	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,063	2,063	0.18	< 0.005	2,069
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.06	1.04	0.44	0.01	0.08	—	0.08	0.08	—	0.08	—	1,325	1,325	0.12	< 0.005	1,329
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	0.03	0.58	0.25	< 0.005	0.05	—	0.05	0.05	—	0.05	—	738	738	0.07	< 0.005	740
Total	0.10	1.63	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,063	2,063	0.18	< 0.005	2,069
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	220
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	0.01	0.11	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	122	122	0.01	< 0.005	123
Total	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	342	342	0.03	< 0.005	343

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
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
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

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	8.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscaping Equipment	1.26	0.14	14.6	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.0	39.0	< 0.005	< 0.005	39.1
Total	10.9	0.14	14.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	39.0	39.0	< 0.005	< 0.005	39.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	8.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9.62	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscap Equipment	0.11	0.01	1.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.18	3.18	< 0.005	< 0.005	3.19
Total	1.87	0.01	1.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.18	3.18	< 0.005	< 0.005	3.19

4.3.2. Mitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consum er Products	8.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscap e Equipme nt	1.26	0.14	14.6	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.0	39.0	< 0.005	< 0.005	39.1
Total	10.9	0.14	14.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	39.0	39.0	< 0.005	< 0.005	39.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consum er Products	8.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9.62	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.01	1.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.18	3.18	< 0.005	< 0.005	3.19
Total	1.87	0.01	1.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.18	3.18	< 0.005	< 0.005	3.19

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	9.76	92.6	102	1.02	0.03	136
City Park	—	—	—	—	—	—	—	—	—	—	0.00	16.4	16.4	< 0.005	< 0.005	16.6
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	7.54	16.1	23.6	0.78	0.02	48.6
Total	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	9.76	92.6	102	1.02	0.03	136

City Park	—	—	—	—	—	—	—	—	—	—	0.00	16.4	16.4	< 0.005	< 0.005	16.6
Condo/To wnhouse	—	—	—	—	—	—	—	—	—	—	7.54	16.1	23.6	0.78	0.02	48.6
Total	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	1.62	15.3	17.0	0.17	< 0.005	22.5
City Park	—	—	—	—	—	—	—	—	—	—	0.00	2.71	2.71	< 0.005	< 0.005	2.74
Condo/To wnhouse	—	—	—	—	—	—	—	—	—	—	1.25	2.66	3.91	0.13	< 0.005	8.04
Total	—	—	—	—	—	—	—	—	—	—	2.86	20.7	23.6	0.30	0.01	33.2

4.4.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	9.76	92.6	102	1.02	0.03	136
City Park	—	—	—	—	—	—	—	—	—	—	0.00	16.4	16.4	< 0.005	< 0.005	16.6
Condo/To wnhouse	—	—	—	—	—	—	—	—	—	—	7.54	16.1	23.6	0.78	0.02	48.6
Total	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	9.76	92.6	102	1.02	0.03	136
City Park	—	—	—	—	—	—	—	—	—	—	0.00	16.4	16.4	< 0.005	< 0.005	16.6

Condo/To	—	—	—	—	—	—	—	—	—	—	7.54	16.1	23.6	0.78	0.02	48.6
Total	—	—	—	—	—	—	—	—	—	—	17.3	125	142	1.80	0.05	201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	1.62	15.3	17.0	0.17	< 0.005	22.5
City Park	—	—	—	—	—	—	—	—	—	—	0.00	2.71	2.71	< 0.005	< 0.005	2.74
Condo/To wnhouse	—	—	—	—	—	—	—	—	—	—	1.25	2.66	3.91	0.13	< 0.005	8.04
Total	—	—	—	—	—	—	—	—	—	—	2.86	20.7	23.6	0.30	0.01	33.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	51.7	0.00	51.7	5.17	0.00	181
City Park	—	—	—	—	—	—	—	—	—	—	0.28	0.00	0.28	0.03	0.00	0.97
Condo/To wnhouse	—	—	—	—	—	—	—	—	—	—	44.6	0.00	44.6	4.45	0.00	156
Total	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	51.7	0.00	51.7	5.17	0.00	181
City Park	—	—	—	—	—	—	—	—	—	—	0.28	0.00	0.28	0.03	0.00	0.97

Condo/To	—	—	—	—	—	—	—	—	—	—	44.6	0.00	44.6	4.45	0.00	156
Total	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	8.57	0.00	8.57	0.86	0.00	30.0
City Park	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	< 0.005	0.00	0.16
Condo/To wnhouse	—	—	—	—	—	—	—	—	—	—	7.38	0.00	7.38	0.74	0.00	25.8
Total	—	—	—	—	—	—	—	—	—	—	16.0	0.00	16.0	1.60	0.00	55.9

4.5.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	51.7	0.00	51.7	5.17	0.00	181
City Park	—	—	—	—	—	—	—	—	—	—	0.28	0.00	0.28	0.03	0.00	0.97
Condo/To wnhouse	—	—	—	—	—	—	—	—	—	—	44.6	0.00	44.6	4.45	0.00	156
Total	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	51.7	0.00	51.7	5.17	0.00	181
City Park	—	—	—	—	—	—	—	—	—	—	0.28	0.00	0.28	0.03	0.00	0.97
Condo/To wnhouse	—	—	—	—	—	—	—	—	—	—	44.6	0.00	44.6	4.45	0.00	156

Total	—	—	—	—	—	—	—	—	—	—	96.6	0.00	96.6	9.65	0.00	338
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	8.57	0.00	8.57	0.86	0.00	30.0
City Park	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	< 0.005	0.00	0.16
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	7.38	0.00	7.38	0.74	0.00	25.8
Total	—	—	—	—	—	—	—	—	—	—	16.0	0.00	16.0	1.60	0.00	55.9

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.03
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.85
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.03
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.85
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48

4.6.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.03
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.85
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.03
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.85
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.88
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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)

Equipme Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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)

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2027	1/28/2027	5.00	20.0	—
Site Preparation	Site Preparation	1/29/2027	3/25/2027	5.00	40.0	—
Grading	Grading	3/26/2027	12/2/2027	5.00	180	—
Building Construction	Building Construction	12/3/2027	12/31/2029	5.00	542	—

Paving	Paving	11/1/2029	12/31/2029	5.00	43.0	—
Architectural Coating	Architectural Coating	8/1/2029	12/31/2029	5.00	109	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 3	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 3	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 3	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 3	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 3	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 3	2.00	8.00	84.0	0.37
Grading	Bore/Drill Rigs	Diesel	Tier 3	1.00	8.00	83.0	0.50
Grading	Crushing/Proc. Equipment	Diesel	Average	1.00	8.00	310	5.00
Building Construction	Cranes	Diesel	Tier 3	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 3	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 3	3.00	7.00	84.0	0.37
Building Construction	Welders	Electric	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 3	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Tier 3	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 3	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 3	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 3	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 3	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 3	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 3	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 3	2.00	8.00	84.0	0.37
Grading	Bore/Drill Rigs	Diesel	Tier 3	1.00	8.00	83.0	0.50
Grading	Crushing/Proc. Equipment	Diesel	Average	1.00	8.00	310	5.00
Building Construction	Cranes	Diesel	Tier 3	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 3	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 3	3.00	7.00	84.0	0.37
Building Construction	Welders	Electric	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 3	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 3	2.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Tier 3	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Electric	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	15.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	6.35	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	25.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT
Grading	Hauling	4.86	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	133	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	27.5	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—

Paving	Worker	15.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	26.6	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	6.35	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	25.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT
Grading	Hauling	4.86	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—

Building Construction	Worker	133	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	27.5	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	26.6	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	812,977	270,992	15,000	5,000	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	11,000	—
Site Preparation	—	—	60.0	0.00	—
Grading	—	7,000	540	0.00	—
Paving	0.00	0.00	0.00	0.00	1.60

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
Single Family Housing	1.60	0%
City Park	0.00	0%
Condo/Townhouse	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	123	589	0.03	< 0.005
2028	123	589	0.03	< 0.005
2029	203	589	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	1,450	1,450	1,450	529,250	10,952	10,952	10,952	3,997,387

City Park	47.0	47.0	47.0	17,170	403	403	403	147,130
Condo/Townhouse	896	896	896	327,040	6,767	6,767	6,767	2,470,109

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	1,450	1,450	1,450	529,250	10,952	10,952	10,952	3,997,387
City Park	47.0	47.0	47.0	17,170	403	403	403	147,130
Condo/Townhouse	896	896	896	327,040	6,767	6,767	6,767	2,470,109

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	145
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	112
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	145
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	112
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)
812976.75	270,992	15,000	5,000	—

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)
Single Family Housing	890,485	170	0.0330	0.0040	4,134,955
City Park	0.00	170	0.0330	0.0040	0.00
Condo/Townhouse	462,488	170	0.0330	0.0040	2,303,250

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)
Single Family Housing	893,711	170	0.0330	0.0040	0.00
City Park	0.00	170	0.0330	0.0040	0.00
Condo/Townhouse	464,329	170	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)
Single Family Housing	5,094,296	31,020,769
City Park	0.00	6,641,851
Condo/Townhouse	3,934,904	1,461,207

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	5,094,296	31,020,769
City Park	0.00	6,641,851
Condo/Townhouse	3,934,904	1,461,207

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	96.0	—
City Park	0.52	—

Condo/Townhouse	82.7	—
-----------------	------	---

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	96.0	—
City Park	0.52	—
Condo/Townhouse	82.7	—

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
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
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
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
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
----------------	-----------	-------------	----------------	---------------	------------	-------------

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
----------------	-----------

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	14.7	annual days of extreme heat
Extreme Precipitation	5.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	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 (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

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

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

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	42.6
AQ-PM	19.7
AQ-DPM	26.7
Drinking Water	24.2
Lead Risk Housing	16.8
Pesticides	66.9
Toxic Releases	19.2
Traffic	17.5
Effect Indicators	—
CleanUp Sites	33.9
Groundwater	0.00
Haz Waste Facilities/Generators	52.6
Impaired Water Bodies	43.8
Solid Waste	67.6
Sensitive Population	—
Asthma	7.78
Cardio-vascular	21.9
Low Birth Weights	57.6
Socioeconomic Factor Indicators	—
Education	40.1
Housing	18.9
Linguistic	33.9
Poverty	9.27
Unemployment	53.9

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	69.66508405
Employed	40.65186706
Median HI	76.83818812
Education	—
Bachelor's or higher	68.16373669
High school enrollment	20.74939048
Preschool enrollment	62.73578853
Transportation	—
Auto Access	98.98626973
Active commuting	32.86282561
Social	—
2-parent households	70.47350186
Voting	76.18375465
Neighborhood	—
Alcohol availability	91.91582189
Park access	53.67637624
Retail density	14.83382523
Supermarket access	17.56704735
Tree canopy	19.82548441
Housing	—
Homeownership	87.93789298
Housing habitability	80.5338124
Low-inc homeowner severe housing cost burden	50.00641601
Low-inc renter severe housing cost burden	61.01629668

Uncrowded housing	70.21686129
Health Outcomes	—
Insured adults	70.06287694
Arthritis	81.7
Asthma ER Admissions	90.9
High Blood Pressure	90.4
Cancer (excluding skin)	63.4
Asthma	69.3
Coronary Heart Disease	87.2
Chronic Obstructive Pulmonary Disease	76.7
Diagnosed Diabetes	79.4
Life Expectancy at Birth	85.3
Cognitively Disabled	78.9
Physically Disabled	94.1
Heart Attack ER Admissions	88.4
Mental Health Not Good	61.1
Chronic Kidney Disease	85.5
Obesity	71.5
Pedestrian Injuries	42.0
Physical Health Not Good	74.9
Stroke	88.3
Health Risk Behaviors	—
Binge Drinking	16.3
Current Smoker	61.3
No Leisure Time for Physical Activity	65.6
Climate Change Exposures	—
Wildfire Risk	53.8
SLR Inundation Area	0.0

Children	14.1
Elderly	76.6
English Speaking	35.0
Foreign-born	48.4
Outdoor Workers	72.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	74.4
Traffic Density	32.8
Traffic Access	23.0
Other Indices	—
Hardship	40.9
Other Decision Support	—
2016 Voting	79.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	19.0
Healthy Places Index Score for Project Location (b)	71.0
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	Per PD
Construction: Construction Phases	Constrcution Schedule
Operations: Vehicle Data	Updated to reflect PD
Operations: Hearths	No Hearth options will be installed
Construction: Off-Road Equipment	CE - T3 Design Feature
Construction: Off-Road Equipment EF	Updated Crusher to mach proposed equipment

ATTACHMENT B

CalEEMod Emission Model – General Plan Buildout Scenario

Oak Crest GP Scenario Detailed Report

Table of Contents

1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.3. Construction Emissions by Year, Mitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
 - 2.6. Operations Emissions by Sector, Mitigated
3. Construction Emissions Details
 - 3.1. Demolition (2027) - Unmitigated
 - 3.2. Demolition (2027) - Mitigated
 - 3.3. Site Preparation (2027) - Unmitigated

3.4. Site Preparation (2027) - Mitigated

3.5. Grading (2027) - Unmitigated

3.6. Grading (2027) - Mitigated

3.7. Building Construction (2027) - Unmitigated

3.8. Building Construction (2027) - Mitigated

3.9. Building Construction (2028) - Unmitigated

3.10. Building Construction (2028) - Mitigated

3.11. Building Construction (2029) - Unmitigated

3.12. Building Construction (2029) - Mitigated

3.13. Paving (2029) - Unmitigated

3.14. Paving (2029) - Mitigated

3.15. Architectural Coating (2029) - Unmitigated

3.16. Architectural Coating (2029) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Oak Crest GP Scenario
Construction Start Date	1/1/2027
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.2
Precipitation (days)	21
Location	33.16131403374409, -117.16634716646988
County	San Diego
City	San Marcos
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6215
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.31

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
Single Family Housing	89	Dwelling Unit	29	173,550	1,042,444	—	248	—

City Park	16	Acre	16	0.00	200,000	200,000	—	—
High School	2,585	Student	7.9	342,929	25,000	25,000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-6	Use Diesel Particulate Filters
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26	40	140	0.20	1.6	9.5	11	1.7	3.7	5.5	—	23,072	23,072	0.88	0.30	23,171
Mit.	26	40	140	0.20	0.25	9.5	9.8	0.27	3.7	4.0	—	23,072	23,072	0.88	0.30	23,171
% Reduced	—	—	—	—	85%	—	12%	85%	—	27%	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26	40	140	0.20	1.6	20	21	1.7	10	11	—	23,059	23,059	0.89	0.32	23,157
Mit.	26	40	140	0.20	0.25	20	20	0.27	10	10	—	23,059	23,059	0.89	0.32	23,157
% Reduced	—	—	—	—	85%	—	4%	85%	—	7%	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	8.2	24	75	0.11	0.97	7.0	8.0	1.0	3.0	4.0	—	12,490	12,490	0.48	0.21	12,548
Mit.	8.2	24	75	0.11	0.15	7.0	7.2	0.16	3.0	3.1	—	12,490	12,490	0.48	0.21	12,548
% Reduced	—	—	—	—	85%	—	10%	85%	—	22%	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.5	4.4	14	0.02	0.18	1.3	1.5	0.19	0.54	0.73	—	2,068	2,068	0.08	0.04	2,077
Mit.	1.5	4.4	14	0.02	0.03	1.3	1.3	0.03	0.54	0.57	—	2,068	2,068	0.08	0.04	2,077
% Reduced	—	—	—	—	85%	—	10%	85%	—	22%	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.7	40	140	0.20	1.6	9.5	11	1.7	3.7	5.5	—	23,072	23,072	0.88	0.25	23,171
2028	1.0	13	21	0.03	0.44	1.9	2.4	0.40	0.47	0.87	—	5,311	5,311	0.17	0.30	5,412
2029	26	13	22	0.03	0.44	2.2	2.7	0.39	0.54	0.93	—	5,550	5,550	0.18	0.30	5,651
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.7	40	140	0.20	1.6	20	21	1.7	10	11	—	23,059	23,059	0.89	0.30	23,157
2028	1.0	13	20	0.03	0.44	1.9	2.4	0.40	0.47	0.87	—	5,224	5,224	0.18	0.30	5,318
2029	26	22	32	0.05	0.84	2.3	3.2	0.75	0.56	1.3	—	7,083	7,083	0.25	0.32	7,184
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.5	24	75	0.11	0.97	7.0	8.0	1.0	3.0	4.0	—	12,490	12,490	0.48	0.15	12,548
2028	0.72	9.4	15	0.02	0.32	1.4	1.7	0.29	0.33	0.62	—	3,751	3,751	0.13	0.21	3,820
2029	8.2	10	16	0.02	0.36	1.4	1.8	0.32	0.35	0.67	—	3,972	3,972	0.13	0.21	4,040

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.28	4.4	14	0.02	0.18	1.3	1.5	0.19	0.54	0.73	—	2,068	2,068	0.08	0.03	2,077
2028	0.13	1.7	2.7	< 0.005	0.06	0.25	0.30	0.05	0.06	0.11	—	621	621	0.02	0.04	632
2029	1.5	1.9	2.9	< 0.005	0.07	0.26	0.33	0.06	0.06	0.12	—	658	658	0.02	0.03	669

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.7	40	140	0.20	0.25	9.5	9.8	0.27	3.7	4.0	—	23,072	23,072	0.88	0.25	23,171
2028	1.0	13	21	0.03	0.09	1.9	2.0	0.08	0.47	0.54	—	5,311	5,311	0.17	0.30	5,412
2029	26	13	22	0.03	0.09	2.2	2.0	0.07	0.54	0.53	—	5,550	5,550	0.18	0.30	5,651
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.7	40	140	0.20	0.25	20	20	0.27	10	10	—	23,059	23,059	0.89	0.30	23,157
2028	1.0	13	20	0.03	0.09	1.9	2.0	0.08	0.47	0.54	—	5,224	5,224	0.18	0.30	5,318
2029	26	22	32	0.05	0.09	2.3	2.0	0.07	0.56	0.53	—	7,083	7,083	0.25	0.32	7,184
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.5	24	75	0.11	0.15	7.0	7.2	0.16	3.0	3.1	—	12,490	12,490	0.48	0.15	12,548
2028	0.72	9.4	15	0.02	0.06	1.4	1.4	0.06	0.33	0.39	—	3,751	3,751	0.13	0.21	3,820
2029	8.2	10	16	0.02	NaN	1.4	NaN	NaN	0.35	NaN	—	3,972	3,972	0.13	0.21	4,040
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.28	4.4	14	0.02	0.03	1.3	1.3	0.03	0.54	0.57	—	2,068	2,068	0.08	0.03	2,077
2028	0.13	1.7	2.7	< 0.005	0.01	0.25	0.26	0.01	0.06	0.07	—	621	621	0.02	0.04	632
2029	1.5	1.9	2.9	< 0.005	NaN	0.26	NaN	NaN	0.06	NaN	—	658	658	0.02	0.03	669

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31	13	139	0.32	0.39	29	29	0.37	7.3	7.7	314	35,172	35,487	33	1.3	36,768
Mit.	31	12	139	0.32	0.34	29	29	0.32	7.3	7.6	314	34,360	34,675	33	1.3	35,954
% Reduced	< 0.5%	5%	< 0.5%	1%	13%	—	< 0.5%	14%	—	1%	—	2%	2%	< 0.5%	< 0.5%	2%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	28	13	113	0.30	0.37	29	29	0.35	7.3	7.6	314	33,718	34,033	33	1.3	35,270
Mit.	28	13	112	0.30	0.31	29	29	0.30	7.3	7.6	314	32,906	33,221	33	1.3	34,456
% Reduced	< 0.5%	5%	< 0.5%	1%	14%	—	< 0.5%	15%	—	1%	—	2%	2%	< 0.5%	< 0.5%	2%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29	13	122	0.31	0.38	28	29	0.36	7.2	7.5	314	33,964	34,278	33	1.3	35,539
Mit.	29	13	122	0.30	0.33	28	29	0.31	7.2	7.5	314	33,152	33,466	33	1.3	34,725
% Reduced	< 0.5%	5%	< 0.5%	1%	14%	—	< 0.5%	14%	—	1%	—	2%	2%	< 0.5%	< 0.5%	2%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.4	2.4	22	0.06	0.07	5.2	5.2	0.07	1.3	1.4	52	5,623	5,675	5.5	0.22	5,884
Mit.	5.4	2.3	22	0.06	0.06	5.2	5.2	0.06	1.3	1.4	52	5,489	5,541	5.5	0.22	5,749
% Reduced	< 0.5%	5%	< 0.5%	1%	14%	—	< 0.5%	14%	—	1%	—	2%	2%	< 0.5%	< 0.5%	2%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16	10	118	0.31	0.20	29	29	0.19	7.3	7.5	—	31,113	31,113	1.4	1.2	31,559
Area	15	0.17	20	< 0.005	0.03	—	0.03	0.02	—	0.02	0.00	75	75	< 0.005	< 0.005	75
Energy	0.12	2.1	1.5	0.01	0.16	—	0.16	0.16	—	0.16	—	3,873	3,873	0.48	0.04	3,896
Water	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Waste	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Total	31	13	139	0.32	0.39	29	29	0.37	7.3	7.7	314	35,172	35,487	33	1.3	36,768
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16	11	111	0.29	0.20	29	29	0.19	7.3	7.5	—	29,733	29,733	1.4	1.2	30,136
Area	12	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.12	2.1	1.5	0.01	0.16	—	0.16	0.16	—	0.16	—	3,873	3,873	0.48	0.04	3,896
Water	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Waste	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Total	28	13	113	0.30	0.37	29	29	0.35	7.3	7.6	314	33,718	34,033	33	1.3	35,270
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16	11	111	0.29	0.20	28	29	0.19	7.2	7.4	—	29,942	29,942	1.4	1.2	30,368
Area	14	0.09	9.9	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	37	37	< 0.005	< 0.005	37
Energy	0.12	2.1	1.5	0.01	0.16	—	0.16	0.16	—	0.16	—	3,873	3,873	0.48	0.04	3,896
Water	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Waste	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Total	29	13	122	0.31	0.38	28	29	0.36	7.2	7.5	314	33,964	34,278	33	1.3	35,539
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.9	2.1	20	0.05	0.04	5.2	5.2	0.03	1.3	1.3	—	4,957	4,957	0.23	0.20	5,028
Area	2.5	0.02	1.8	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.1	6.1	< 0.005	< 0.005	6.1
Energy	0.02	0.38	0.27	< 0.005	0.03	—	0.03	0.03	—	0.03	—	641	641	0.08	0.01	645
Water	—	—	—	—	—	—	—	—	—	—	4.6	18	23	0.48	0.01	38
Waste	—	—	—	—	—	—	—	—	—	—	47	0.00	47	4.7	0.00	166
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43
Total	5.4	2.4	22	0.06	0.07	5.2	5.2	0.07	1.3	1.4	52	5,623	5,675	5.5	0.22	5,884

2.6. Operations Emissions by Sector, Mitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16	10	118	0.31	0.20	29	29	0.19	7.3	7.5	—	31,113	31,113	1.4	1.2	31,559
Area	15	0.17	20	< 0.005	0.03	—	0.03	0.02	—	0.02	0.00	75	75	< 0.005	< 0.005	75
Energy	0.08	1.5	1.2	0.01	0.11	—	0.11	0.11	—	0.11	—	3,062	3,062	0.41	0.03	3,082
Water	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Waste	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Total	31	12	139	0.32	0.34	29	29	0.32	7.3	7.6	314	34,360	34,675	33	1.3	35,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16	11	111	0.29	0.20	29	29	0.19	7.3	7.5	—	29,733	29,733	1.4	1.2	30,136
Area	12	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Energy	0.08	1.5	1.2	0.01	0.11	—	0.11	0.11	—	0.11	—	3,062	3,062	0.41	0.03	3,082
Water	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Waste	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Total	28	13	112	0.30	0.31	29	29	0.30	7.3	7.6	314	32,906	33,221	33	1.3	34,456
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16	11	111	0.29	0.20	28	29	0.19	7.2	7.4	—	29,942	29,942	1.4	1.2	30,368
Area	14	0.09	9.9	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	37	37	< 0.005	< 0.005	37
Energy	0.08	1.5	1.2	0.01	0.11	—	0.11	0.11	—	0.11	—	3,062	3,062	0.41	0.03	3,082
Water	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Waste	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Total	29	13	122	0.30	0.33	28	29	0.31	7.2	7.5	314	33,152	33,466	33	1.3	34,725
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.9	2.1	20	0.05	0.04	5.2	5.2	0.03	1.3	1.3	—	4,957	4,957	0.23	0.20	5,028
Area	2.5	0.02	1.8	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.1	6.1	< 0.005	< 0.005	6.1
Energy	0.01	0.26	0.22	< 0.005	0.02	—	0.02	0.02	—	0.02	—	507	507	0.07	0.01	510
Water	—	—	—	—	—	—	—	—	—	—	4.6	18	23	0.48	0.01	38
Waste	—	—	—	—	—	—	—	—	—	—	47	0.00	47	4.7	0.00	166
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43
Total	5.4	2.3	22	0.06	0.06	5.2	5.2	0.06	1.3	1.4	52	5,489	5,541	5.5	0.22	5,749

3. Construction Emissions Details

3.1. Demolition (2027) - Unmitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	17	18	0.03	0.79	—	0.79	0.71	—	0.71	—	3,427	3,427	0.14	0.03	3,439
Demolition	—	—	—	—	—	0.54	0.54	—	0.08	0.08	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.95	1.00	< 0.005	0.04	—	0.04	0.04	—	0.04	—	188	188	0.01	< 0.005	188
Demolition	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31	31	< 0.005	< 0.005	31
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.05	0.54	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	0.01	0.01	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.57	0.22	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	436	436	0.02	0.07	457
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.2	7.2	< 0.005	< 0.005	7.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24	24	< 0.005	< 0.005	25
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.2	1.2	< 0.005	< 0.005	1.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.0	4.0	< 0.005	< 0.005	4.2

3.2. Demolition (2027) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	17	18	0.03	0.12	—	0.12	0.11	—	0.11	—	3,427	3,427	0.14	0.03	3,439
Demolition	—	—	—	—	—	0.54	0.54	—	0.08	0.08	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.95	1.00	< 0.005	0.01	—	0.01	0.01	—	0.01	—	188	188	0.01	< 0.005	188
Demolition	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31	31	< 0.005	< 0.005	31
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.54	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	0.01	0.01	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.57	0.22	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	436	436	0.02	0.07	457
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.2	7.2	< 0.005	< 0.005	7.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24	24	< 0.005	< 0.005	25
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.2	1.2	< 0.005	< 0.005	1.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.0	4.0	< 0.005	< 0.005	4.2

3.3. Site Preparation (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	24	28	0.05	0.94	—	0.94	0.84	—	0.84	—	5,298	5,298	0.21	0.04	5,316
Dust From Material Movement	—	—	—	—	—	20	20	—	10	10	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	2.6	3.1	0.01	0.10	—	0.10	0.09	—	0.09	—	581	581	0.02	< 0.005	583
Dust From Material Movement	—	—	—	—	—	2.2	2.2	—	1.1	1.1	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.48	0.57	< 0.005	0.02	—	0.02	0.02	—	0.02	—	96	96	< 0.005	< 0.005	96
Dust From Material Movement	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	151	151	0.01	0.01	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17	17	< 0.005	< 0.005	17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.8	2.8	< 0.005	< 0.005	2.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.4. Site Preparation (2027) - Mitigated

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

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

Off-Road Equipment	0.90	24	28	0.05	0.14	—	0.14	0.13	—	0.13	—	5,298	5,298	0.21	0.04	5,316
Dust From Material Movement	—	—	—	—	—	20	20	—	10	10	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	2.6	3.1	0.01	0.02	—	0.02	0.01	—	0.01	—	581	581	0.02	< 0.005	583
Dust From Material Movement	—	—	—	—	—	2.2	2.2	—	1.1	1.1	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.48	0.57	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	96	96	< 0.005	< 0.005	96
Dust From Material Movement	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	151	151	0.01	0.01	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17	17	< 0.005	< 0.005	17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.8	2.8	< 0.005	< 0.005	2.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.5. Grading (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.6	39	139	0.20	1.6	—	1.6	1.7	—	1.7	—	22,509	22,509	0.86	0.19	22,588
Dust From Material Movement	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.6	39	139	0.20	1.6	—	1.6	1.7	—	1.7	—	22,509	22,509	0.86	0.19	22,588

Dust From Material Movement	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.3	19	69	0.10	0.79	—	0.79	0.86	—	0.86	—	11,100	11,100	0.42	0.10	11,139
Dust From Material Movement	—	—	—	—	—	4.5	4.5	—	1.8	1.8	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	3.6	13	0.02	0.14	—	0.14	0.16	—	0.16	—	1,838	1,838	0.07	0.02	1,844
Dust From Material Movement	—	—	—	—	—	0.83	0.83	—	0.33	0.33	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.0	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	228	228	0.01	0.01	232
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.42	0.16	< 0.005	0.01	0.09	0.10	< 0.005	0.02	0.03	—	334	334	0.02	0.05	351
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.08	0.90	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	216	216	0.01	0.01	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.44	0.17	< 0.005	0.01	0.09	0.10	< 0.005	0.02	0.03	—	334	334	0.02	0.05	350
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.45	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	107	107	0.01	< 0.005	109
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.22	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	165	165	0.01	0.03	173
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18	18	< 0.005	< 0.005	18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27	27	< 0.005	< 0.005	29

3.6. Grading (2027) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.6	39	139	0.20	0.24	—	0.24	0.26	—	0.26	—	22,509	22,509	0.86	0.19	22,588
Dust From Material Movement	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.6	39	139	0.20	0.24	—	0.24	0.26	—	0.26	—	22,509	22,509	0.86	0.19	22,588
Dust From Material Movement	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.3	19	69	0.10	0.12	—	0.12	0.13	—	0.13	—	11,100	11,100	0.42	0.10	11,139
Dust From Material Movement	—	—	—	—	—	4.5	4.5	—	1.8	1.8	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	3.6	13	0.02	0.02	—	0.02	0.02	—	0.02	—	1,838	1,838	0.07	0.02	1,844
Dust From Material Movement	—	—	—	—	—	0.83	0.83	—	0.33	0.33	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.0	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	228	228	0.01	0.01	232
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.42	0.16	< 0.005	0.01	0.09	0.10	< 0.005	0.02	0.03	—	334	334	0.02	0.05	351

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.90	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	216	216	0.01	0.01	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.44	0.17	< 0.005	0.01	0.09	0.10	< 0.005	0.02	0.03	—	334	334	0.02	0.05	350
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.45	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	107	107	0.01	< 0.005	109
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.22	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	165	165	0.01	0.03	173
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18	18	< 0.005	< 0.005	18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27	27	< 0.005	< 0.005	29

3.7. Building Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11	13	0.02	0.42	—	0.42	0.38	—	0.38	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.60	0.77	< 0.005	0.02	—	0.02	0.02	—	0.02	—	124	124	0.01	< 0.005	125
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21	21	< 0.005	< 0.005	21
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.54	6.3	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,519	1,519	0.08	0.06	1,540
Vendor	0.05	2.1	0.96	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,581	1,581	0.06	0.22	1,649
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	87	87	< 0.005	< 0.005	88
Vendor	< 0.005	0.12	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	90	90	< 0.005	0.01	94
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14	14	< 0.005	< 0.005	15
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15	15	< 0.005	< 0.005	15
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

3.8. Building Construction (2027) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11	13	0.02	0.06	—	0.06	0.06	—	0.06	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.60	0.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	124	124	0.01	< 0.005	125
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21	21	< 0.005	< 0.005	21
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.54	6.3	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,519	1,519	0.08	0.06	1,540
Vendor	0.05	2.1	0.96	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,581	1,581	0.06	0.22	1,649
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	87	87	< 0.005	< 0.005	88
Vendor	< 0.005	0.12	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	90	90	< 0.005	0.01	94
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14	14	< 0.005	< 0.005	15
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15	15	< 0.005	< 0.005	15
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

3.9. Building Construction (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11	13	0.02	0.42	—	0.42	0.38	—	0.38	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11	13	0.02	0.42	—	0.42	0.38	—	0.38	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	7.6	9.7	0.01	0.30	—	0.30	0.27	—	0.27	—	1,569	1,569	0.06	0.01	1,574

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.4	1.8	< 0.005	0.06	—	0.06	0.05	—	0.05	—	260	260	0.01	< 0.005	261
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.43	6.8	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,580	1,580	0.03	0.06	1,603
Vendor	0.05	1.9	0.90	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,540	1,540	0.06	0.22	1,611
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.49	6.0	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,493	1,493	0.03	0.06	1,511
Vendor	0.05	2.0	0.93	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,541	1,541	0.06	0.22	1,609
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.35	4.3	0.00	0.00	1.1	1.1	0.00	0.25	0.25	—	1,079	1,079	0.02	0.04	1,093
Vendor	0.04	1.4	0.66	0.01	0.02	0.30	0.31	0.02	0.08	0.10	—	1,104	1,104	0.04	0.16	1,153
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.79	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	179	179	< 0.005	0.01	181
Vendor	0.01	0.25	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	183	183	0.01	0.03	191
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

3.10. Building Construction (2028) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11	13	0.02	0.06	—	0.06	0.06	—	0.06	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11	13	0.02	0.06	—	0.06	0.06	—	0.06	—	2,190	2,190	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	7.6	9.7	0.01	0.05	—	0.05	0.04	—	0.04	—	1,569	1,569	0.06	0.01	1,574
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.4	1.8	< 0.005	0.01	—	0.01	0.01	—	0.01	—	260	260	0.01	< 0.005	261
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.43	6.8	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,580	1,580	0.03	0.06	1,603
Vendor	0.05	1.9	0.90	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,540	1,540	0.06	0.22	1,611

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.49	6.0	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,493	1,493	0.03	0.06	1,511
Vendor	0.05	2.0	0.93	0.01	0.02	0.42	0.44	0.02	0.12	0.14	—	1,541	1,541	0.06	0.22	1,609
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.35	4.3	0.00	0.00	1.1	1.1	0.00	0.25	0.25	—	1,079	1,079	0.02	0.04	1,093
Vendor	0.04	1.4	0.66	0.01	0.02	0.30	0.31	0.02	0.08	0.10	—	1,104	1,104	0.04	0.16	1,153
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.79	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	179	179	< 0.005	0.01	181
Vendor	0.01	0.25	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	183	183	0.01	0.03	191
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

3.11. Building Construction (2029) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11	13	0.02	0.42	—	0.42	0.38	—	0.38	—	2,189	2,189	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.37	11	13	0.02	0.42	—	0.42	0.38	—	0.38	—	2,189	2,189	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	7.6	9.6	0.01	0.30	—	0.30	0.27	—	0.27	—	1,564	1,564	0.06	0.01	1,569
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.4	1.8	< 0.005	0.05	—	0.05	0.05	—	0.05	—	259	259	0.01	< 0.005	260
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.38	6.4	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,553	1,553	0.02	0.06	1,575
Vendor	0.05	1.8	0.88	0.01	0.02	0.42	0.44	0.01	0.12	0.13	—	1,496	1,496	0.06	0.21	1,563
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.44	5.6	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,467	1,467	0.03	0.06	1,485
Vendor	0.05	1.9	0.89	0.01	0.02	0.42	0.44	0.01	0.12	0.13	—	1,498	1,498	0.06	0.21	1,562
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.31	4.1	0.00	0.00	1.0	1.0	0.00	0.25	0.25	—	1,057	1,057	0.02	0.04	1,071
Vendor	0.04	1.3	0.63	0.01	0.02	0.30	0.31	0.01	0.08	0.09	—	1,069	1,069	0.04	0.15	1,116
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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.74	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	175	175	< 0.005	0.01	177
Vendor	0.01	0.24	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	177	177	0.01	0.02	185
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

3.12. Building Construction (2029) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11	13	0.02	0.06	—	0.06	0.06	—	0.06	—	2,189	2,189	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11	13	0.02	0.06	—	0.06	0.06	—	0.06	—	2,189	2,189	0.09	0.02	2,197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	7.6	9.6	0.01	0.05	—	0.05	0.04	—	0.04	—	1,564	1,564	0.06	0.01	1,569
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.4	1.8	< 0.005	0.01	—	0.01	0.01	—	0.01	—	259	259	0.01	< 0.005	260

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.38	6.4	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,553	1,553	0.02	0.06	1,575
Vendor	0.05	1.8	0.88	0.01	0.02	0.42	0.44	0.01	0.12	0.13	—	1,496	1,496	0.06	0.21	1,563
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.44	5.6	0.00	0.00	1.5	1.5	0.00	0.35	0.35	—	1,467	1,467	0.03	0.06	1,485
Vendor	0.05	1.9	0.89	0.01	0.02	0.42	0.44	0.01	0.12	0.13	—	1,498	1,498	0.06	0.21	1,562
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.31	4.1	0.00	0.00	1.0	1.0	0.00	0.25	0.25	—	1,057	1,057	0.02	0.04	1,071
Vendor	0.04	1.3	0.63	0.01	0.02	0.30	0.31	0.01	0.08	0.09	—	1,069	1,069	0.04	0.15	1,116
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.74	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	175	175	< 0.005	0.01	177
Vendor	0.01	0.24	0.12	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	177	177	0.01	0.02	185
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

3.13. Paving (2029) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	8.6	11	0.01	0.39	—	0.39	0.36	—	0.36	—	1,511	1,511	0.06	0.01	1,516
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.0	1.2	< 0.005	0.05	—	0.05	0.04	—	0.04	—	178	178	0.01	< 0.005	179
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.19	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29	29	< 0.005	< 0.005	30
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	15	15	< 0.005	< 0.005	15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.5	2.5	< 0.005	< 0.005	2.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.14. Paving (2029) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	8.6	11	0.01	0.06	—	0.06	0.05	—	0.05	—	1,511	1,511	0.06	0.01	1,516
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.0	1.2	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	179
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.19	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29	29	< 0.005	< 0.005	30
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	15	15	< 0.005	< 0.005	15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.5	2.5	< 0.005	< 0.005	2.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.15. Architectural Coating (2029) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	1.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.08	1.3	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	311	311	< 0.005	0.01	315
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	1.1	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	293	293	0.01	0.01	297
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.34	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88	88	< 0.005	< 0.005	90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15	15	< 0.005	< 0.005	15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

3.16. Architectural Coating (2029) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	—	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	1.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.08	1.3	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	311	311	< 0.005	0.01	315
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	1.1	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	293	293	0.01	0.01	297
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.34	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88	88	< 0.005	< 0.005	90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15	15	< 0.005	< 0.005	15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.5	2.1	24	0.06	0.04	5.7	5.7	0.04	1.4	1.5	—	6,192	6,192	0.28	0.24	6,283
City Park	1.5	0.96	11	0.03	0.02	2.7	2.7	0.02	0.68	0.69	—	2,885	2,885	0.12	0.11	2,926
High School	11	7.3	83	0.22	0.14	20	20	0.13	5.2	5.3	—	22,035	22,035	0.95	0.81	22,350
Total	16	10	118	0.31	0.20	29	29	0.19	7.3	7.5	—	31,113	31,113	1.4	1.2	31,559
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.4	2.3	23	0.06	0.04	5.7	5.7	0.04	1.4	1.5	—	5,919	5,919	0.30	0.25	6,001
City Park	1.5	1.0	10	0.03	0.02	2.7	2.7	0.02	0.68	0.69	—	2,757	2,757	0.13	0.11	2,794
High School	11	8.0	78	0.21	0.14	20	20	0.13	5.2	5.3	—	21,057	21,057	1.0	0.86	21,341
Total	16	11	111	0.29	0.20	29	29	0.19	7.3	7.5	—	29,733	29,733	1.4	1.2	30,136
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.62	0.42	4.1	0.01	0.01	1.0	1.0	0.01	0.26	0.27	—	987	987	0.05	0.04	1,001
City Park	0.26	0.19	1.9	< 0.005	< 0.005	0.48	0.48	< 0.005	0.12	0.12	—	460	460	0.02	0.02	466
High School	2.0	1.4	14	0.04	0.03	3.7	3.7	0.02	0.93	0.95	—	3,511	3,511	0.16	0.14	3,560
Total	2.9	2.1	20	0.05	0.04	5.2	5.2	0.03	1.3	1.3	—	4,957	4,957	0.23	0.20	5,028

4.1.2. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.5	2.1	24	0.06	0.04	5.7	5.7	0.04	1.4	1.5	—	6,192	6,192	0.28	0.24	6,283
City Park	1.5	0.96	11	0.03	0.02	2.7	2.7	0.02	0.68	0.69	—	2,885	2,885	0.12	0.11	2,926
High School	11	7.3	83	0.22	0.14	20	20	0.13	5.2	5.3	—	22,035	22,035	0.95	0.81	22,350
Total	16	10	118	0.31	0.20	29	29	0.19	7.3	7.5	—	31,113	31,113	1.4	1.2	31,559
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.4	2.3	23	0.06	0.04	5.7	5.7	0.04	1.4	1.5	—	5,919	5,919	0.30	0.25	6,001
City Park	1.5	1.0	10	0.03	0.02	2.7	2.7	0.02	0.68	0.69	—	2,757	2,757	0.13	0.11	2,794
High School	11	8.0	78	0.21	0.14	20	20	0.13	5.2	5.3	—	21,057	21,057	1.0	0.86	21,341
Total	16	11	111	0.29	0.20	29	29	0.19	7.3	7.5	—	29,733	29,733	1.4	1.2	30,136
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.62	0.42	4.1	0.01	0.01	1.0	1.0	0.01	0.26	0.27	—	987	987	0.05	0.04	1,001
City Park	0.26	0.19	1.9	< 0.005	< 0.005	0.48	0.48	< 0.005	0.12	0.12	—	460	460	0.02	0.02	466
High School	2.0	1.4	14	0.04	0.03	3.7	3.7	0.02	0.93	0.95	—	3,511	3,511	0.16	0.14	3,560
Total	2.9	2.1	20	0.05	0.04	5.2	5.2	0.03	1.3	1.3	—	4,957	4,957	0.23	0.20	5,028

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	254	254	0.05	0.01	257
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	1,075	1,075	0.21	0.03	1,088
Total	—	—	—	—	—	—	—	—	—	—	—	1,329	1,329	0.26	0.03	1,345
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	254	254	0.05	0.01	257
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	1,075	1,075	0.21	0.03	1,088
Total	—	—	—	—	—	—	—	—	—	—	—	1,329	1,329	0.26	0.03	1,345
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	42	42	0.01	< 0.005	43
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	178	178	0.03	< 0.005	180
Total	—	—	—	—	—	—	—	—	—	—	—	220	220	0.04	0.01	223

4.2.2. Electricity Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	256	256	0.05	0.01	259
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	1,075	1,075	0.21	0.03	1,088
Total	—	—	—	—	—	—	—	—	—	—	—	1,331	1,331	0.26	0.03	1,346
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	256	256	0.05	0.01	259
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	1,075	1,075	0.21	0.03	1,088
Total	—	—	—	—	—	—	—	—	—	—	—	1,331	1,331	0.26	0.03	1,346
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	42	42	0.01	< 0.005	43
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	178	178	0.03	< 0.005	180
Total	—	—	—	—	—	—	—	—	—	—	—	220	220	0.04	0.01	223

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	—	813	813	0.07	< 0.005	816
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
High School	0.08	1.5	1.2	0.01	0.11	—	0.11	0.11	—	0.11	—	1,731	1,731	0.15	< 0.005	1,736
Total	0.12	2.1	1.5	0.01	0.16	—	0.16	0.16	—	0.16	—	2,544	2,544	0.23	< 0.005	2,551
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	—	813	813	0.07	< 0.005	816
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
High School	0.08	1.5	1.2	0.01	0.11	—	0.11	0.11	—	0.11	—	1,731	1,731	0.15	< 0.005	1,736
Total	0.12	2.1	1.5	0.01	0.16	—	0.16	0.16	—	0.16	—	2,544	2,544	0.23	< 0.005	2,551
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	135	135	0.01	< 0.005	135
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
High School	0.01	0.26	0.22	< 0.005	0.02	—	0.02	0.02	—	0.02	—	287	287	0.03	< 0.005	287
Total	0.02	0.38	0.27	< 0.005	0.03	—	0.03	0.03	—	0.03	—	421	421	0.04	< 0.005	422

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
High School	0.08	1.5	1.2	0.01	0.11	—	0.11	0.11	—	0.11	—	1,731	1,731	0.15	< 0.005	1,736
Total	0.08	1.5	1.2	0.01	0.11	—	0.11	0.11	—	0.11	—	1,731	1,731	0.15	< 0.005	1,736
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
High School	0.08	1.5	1.2	0.01	0.11	—	0.11	0.11	—	0.11	—	1,731	1,731	0.15	< 0.005	1,736
Total	0.08	1.5	1.2	0.01	0.11	—	0.11	0.11	—	0.11	—	1,731	1,731	0.15	< 0.005	1,736
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
High School	0.01	0.26	0.22	< 0.005	0.02	—	0.02	0.02	—	0.02	—	287	287	0.03	< 0.005	287
Total	0.01	0.26	0.22	< 0.005	0.02	—	0.02	0.02	—	0.02	—	287	287	0.03	< 0.005	287

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscaping Equipment	2.9	0.17	20	< 0.005	0.03	—	0.03	0.02	—	0.02	—	75	75	< 0.005	< 0.005	75
Total	15	0.17	20	< 0.005	0.03	—	0.03	0.02	—	0.02	0.00	75	75	< 0.005	< 0.005	75
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	12	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscap Equipment	0.26	0.02	1.8	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.1	6.1	< 0.005	< 0.005	6.1
Total	2.5	0.02	1.8	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.1	6.1	< 0.005	< 0.005	6.1

4.3.2. Mitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consum er Products	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscap e Equipme nt	2.9	0.17	20	< 0.005	0.03	—	0.03	0.02	—	0.02	—	75	75	< 0.005	< 0.005	75
Total	15	0.17	20	< 0.005	0.03	—	0.03	0.02	—	0.02	0.00	75	75	< 0.005	< 0.005	75
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consum er Products	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	12	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.26	0.02	1.8	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.1	6.1	< 0.005	< 0.005	6.1
Total	2.5	0.02	1.8	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.1	6.1	< 0.005	< 0.005	6.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	6.0	57	63	0.63	0.02	83
City Park	—	—	—	—	—	—	—	—	—	—	0.00	16	16	< 0.005	< 0.005	17
High School	—	—	—	—	—	—	—	—	—	—	22	38	60	2.2	0.05	132
Total	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	6.0	57	63	0.63	0.02	83

City Park	—	—	—	—	—	—	—	—	—	—	0.00	16	16	< 0.005	< 0.005	17
High School	—	—	—	—	—	—	—	—	—	—	22	38	60	2.2	0.05	132
Total	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.99	9.4	10	0.10	< 0.005	14
City Park	—	—	—	—	—	—	—	—	—	—	0.00	2.7	2.7	< 0.005	< 0.005	2.7
High School	—	—	—	—	—	—	—	—	—	—	3.6	6.3	9.9	0.37	0.01	22
Total	—	—	—	—	—	—	—	—	—	—	4.6	18	23	0.48	0.01	38

4.4.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	6.0	57	63	0.63	0.02	83
City Park	—	—	—	—	—	—	—	—	—	—	0.00	16	16	< 0.005	< 0.005	17
High School	—	—	—	—	—	—	—	—	—	—	22	38	60	2.2	0.05	132
Total	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	6.0	57	63	0.63	0.02	83
City Park	—	—	—	—	—	—	—	—	—	—	0.00	16	16	< 0.005	< 0.005	17

High School	—	—	—	—	—	—	—	—	—	—	22	38	60	2.2	0.05	132
Total	—	—	—	—	—	—	—	—	—	—	28	111	139	2.9	0.07	232
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.99	9.4	10	0.10	< 0.005	14
City Park	—	—	—	—	—	—	—	—	—	—	0.00	2.7	2.7	< 0.005	< 0.005	2.7
High School	—	—	—	—	—	—	—	—	—	—	3.6	6.3	9.9	0.37	0.01	22
Total	—	—	—	—	—	—	—	—	—	—	4.6	18	23	0.48	0.01	38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	32	0.00	32	3.2	0.00	111
City Park	—	—	—	—	—	—	—	—	—	—	0.74	0.00	0.74	0.07	0.00	2.6
High School	—	—	—	—	—	—	—	—	—	—	254	0.00	254	25	0.00	890
Total	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	32	0.00	32	3.2	0.00	111

City Park	—	—	—	—	—	—	—	—	—	—	0.74	0.00	0.74	0.07	0.00	2.6
High School	—	—	—	—	—	—	—	—	—	—	254	0.00	254	25	0.00	890
Total	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	5.2	0.00	5.2	0.52	0.00	18
City Park	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	0.43
High School	—	—	—	—	—	—	—	—	—	—	42	0.00	42	4.2	0.00	147
Total	—	—	—	—	—	—	—	—	—	—	47	0.00	47	4.7	0.00	166

4.5.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	32	0.00	32	3.2	0.00	111
City Park	—	—	—	—	—	—	—	—	—	—	0.74	0.00	0.74	0.07	0.00	2.6
High School	—	—	—	—	—	—	—	—	—	—	254	0.00	254	25	0.00	890
Total	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	32	0.00	32	3.2	0.00	111
City Park	—	—	—	—	—	—	—	—	—	—	0.74	0.00	0.74	0.07	0.00	2.6

High School	—	—	—	—	—	—	—	—	—	—	254	0.00	254	25	0.00	890
Total	—	—	—	—	—	—	—	—	—	—	287	0.00	287	29	0.00	1,003
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	5.2	0.00	5.2	0.52	0.00	18
City Park	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	0.43
High School	—	—	—	—	—	—	—	—	—	—	42	0.00	42	4.2	0.00	147
Total	—	—	—	—	—	—	—	—	—	—	47	0.00	47	4.7	0.00	166

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.2
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.2

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43

4.6.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.2
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.2
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00

High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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)

Equipme Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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)

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2027	1/28/2027	5.0	20	—
Site Preparation	Site Preparation	1/29/2027	3/25/2027	5.0	40	—
Grading	Grading	3/26/2027	12/2/2027	5.0	180	—
Building Construction	Building Construction	12/3/2027	12/31/2029	5.0	542	—

Paving	Paving	11/1/2029	12/31/2029	5.0	43	—
Architectural Coating	Architectural Coating	8/1/2029	12/31/2029	5.0	109	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.0	33	0.73
Demolition	Excavators	Diesel	Tier 3	3.0	8.0	36	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 3	2.0	8.0	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	3.0	8.0	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 3	4.0	8.0	84	0.37
Grading	Excavators	Diesel	Tier 3	2.0	8.0	36	0.38
Grading	Graders	Diesel	Tier 3	1.00	8.0	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.0	367	0.40
Grading	Scrapers	Diesel	Tier 3	2.0	8.0	423	0.48
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 3	2.0	8.0	84	0.37
Grading	Bore/Drill Rigs	Diesel	Tier 3	1.00	8.0	83	0.50
Grading	Crushing/Proc. Equipment	Diesel	Average	1.00	8.0	310	5.0
Building Construction	Cranes	Diesel	Tier 3	1.00	7.0	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	3.0	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Tier 3	1.00	8.0	14	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 3	3.0	7.0	84	0.37
Building Construction	Welders	Electric	Average	1.00	8.0	46	0.45
Paving	Pavers	Diesel	Tier 3	2.0	8.0	81	0.42

Paving	Paving Equipment	Diesel	Tier 3	2.0	8.0	89	0.36
Paving	Rollers	Diesel	Tier 3	2.0	8.0	36	0.38
Architectural Coating	Air Compressors	Electric	Average	1.00	6.0	37	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.0	33	0.73
Demolition	Excavators	Diesel	Tier 3	3.0	8.0	36	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 3	2.0	8.0	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	3.0	8.0	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 3	4.0	8.0	84	0.37
Grading	Excavators	Diesel	Tier 3	2.0	8.0	36	0.38
Grading	Graders	Diesel	Tier 3	1.00	8.0	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.0	367	0.40
Grading	Scrapers	Diesel	Tier 3	2.0	8.0	423	0.48
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 3	2.0	8.0	84	0.37
Grading	Bore/Drill Rigs	Diesel	Tier 3	1.00	8.0	83	0.50
Grading	Crushing/Proc. Equipment	Diesel	Average	1.00	8.0	310	5.0
Building Construction	Cranes	Diesel	Tier 3	1.00	7.0	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	3.0	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Tier 3	1.00	8.0	14	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 3	3.0	7.0	84	0.37
Building Construction	Welders	Electric	Average	1.00	8.0	46	0.45
Paving	Pavers	Diesel	Tier 3	2.0	8.0	81	0.42
Paving	Paving Equipment	Diesel	Tier 3	2.0	8.0	89	0.36

Paving	Rollers	Diesel	Tier 3	2.0	8.0	36	0.38
Architectural Coating	Air Compressors	Electric	Average	1.00	6.0	37	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	Worker	15	12	LDA,LDT1,LDT2
Demolition	Vendor	—	7.6	HHDT,MHDT
Demolition	Hauling	6.3	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	18	12	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.6	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	25	12	LDA,LDT1,LDT2
Grading	Vendor	—	7.6	HHDT,MHDT
Grading	Hauling	4.9	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	176	12	LDA,LDT1,LDT2
Building Construction	Vendor	66	7.6	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15	12	LDA,LDT1,LDT2
Paving	Vendor	—	7.6	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	35	12	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	7.6	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15	12	LDA,LDT1,LDT2
Demolition	Vendor	—	7.6	HHDT,MHDT
Demolition	Hauling	6.3	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	18	12	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.6	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	25	12	LDA,LDT1,LDT2
Grading	Vendor	—	7.6	HHDT,MHDT
Grading	Hauling	4.9	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	176	12	LDA,LDT1,LDT2
Building Construction	Vendor	66	7.6	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15	12	LDA,LDT1,LDT2
Paving	Vendor	—	7.6	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	35	12	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.6	HHDT,MHDT

Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	351,439	117,146	529,394	176,465	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	11,000	0.00
Site Preparation	—	—	60	0.00	0.00
Grading	—	7,000	540	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.98

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Single Family Housing	0.98	0%
Paving	City Park	0.00	0%

Paving	High School	0.00	0%
--------	-------------	------	----

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	123	589	0.03	< 0.005
2028	123	589	0.03	< 0.005
2029	203	589	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
Single Family Housing	1,068	1,068	1,068	389,820	8,067	8,067	8,067	2,944,282
City Park	440	440	440	160,600	3,770	3,770	3,770	1,376,219
High School	3,360	3,360	3,360	1,226,582	28,797	28,797	28,797	10,510,875

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
Single Family Housing	1,068	1,068	1,068	389,820	8,067	8,067	8,067	2,944,282
City Park	440	440	440	160,600	3,770	3,770	3,770	1,376,219
High School	3,360	3,360	3,360	1,226,582	28,797	28,797	28,797	10,510,875

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Single Family Housing	Wood Fireplaces	0	0
Single Family Housing	Gas Fireplaces	0	0
Single Family Housing	Propane Fireplaces	0	0
Single Family Housing	Electric Fireplaces	0	0
Single Family Housing	No Fireplaces	89	89
Single Family Housing	Conventional Wood Stoves	0	0
Single Family Housing	Catalytic Wood Stoves	0	0
Single Family Housing	Non-Catalytic Wood Stoves	0	0
Single Family Housing	Pellet Wood Stoves	0	0
City Park	Wood Fireplaces	0	0
City Park	Gas Fireplaces	0	0
City Park	Propane Fireplaces	0	0
City Park	Electric Fireplaces	0	0
City Park	No Fireplaces	0	0
City Park	Conventional Wood Stoves	0	0
City Park	Catalytic Wood Stoves	0	0
City Park	Non-Catalytic Wood Stoves	0	0
City Park	Pellet Wood Stoves	0	0
High School	Wood Fireplaces	0	0
High School	Gas Fireplaces	0	0
High School	Propane Fireplaces	0	0
High School	Electric Fireplaces	0	0
High School	No Fireplaces	0	0
High School	Conventional Wood Stoves	0	0
High School	Catalytic Wood Stoves	0	0
High School	Non-Catalytic Wood Stoves	0	0
High School	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

—	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
undefined	351,439	117,146	529,394	176,465	—

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)
Single Family Housing	546,574	170	0.0330	0.0040	2,538,007
City Park	0.00	170	0.0330	0.0040	0.00
High School	2,313,377	170	0.0330	0.0040	5,400,892

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)
----------	----------------------	-----	-----	-----	-----------------------

Single Family Housing	549,800	170	0.0330	0.0040	0.00
City Park	0.00	170	0.0330	0.0040	0.00
High School	2,313,377	170	0.0330	0.0040	5,400,892

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	3,126,844	19,040,332
City Park	0.00	6,641,851
High School	11,386,822	830,231

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	3,126,844	19,040,332
City Park	0.00	6,641,851
High School	11,386,822	830,231

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	59	0.00
City Park	1.4	0.00
High School	472	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	59	0.00
City Park	1.4	0.00
High School	472	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.0	4.0	18
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.0	4.0	18
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20

5.14.2. Mitigated

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

Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.0	4.0	18
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.0	4.0	18
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	15	annual days of extreme heat
Extreme Precipitation	5.2	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10	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 (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

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	43

AQ-PM	20
AQ-DPM	27
Drinking Water	24
Lead Risk Housing	17
Pesticides	67
Toxic Releases	19
Traffic	17
Effect Indicators	—
CleanUp Sites	34
Groundwater	0.00
Haz Waste Facilities/Generators	53
Impaired Water Bodies	44
Solid Waste	68
Sensitive Population	—
Asthma	7.8
Cardio-vascular	22
Low Birth Weights	58
Socioeconomic Factor Indicators	—
Education	40
Housing	19
Linguistic	34
Poverty	9.3
Unemployment	54

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	69.66508405
Employed	40.65186706
Median HI	76.83818812
Education	—
Bachelor's or higher	68.16373669
High school enrollment	20.74939048
Preschool enrollment	62.73578853
Transportation	—
Auto Access	98.98626973
Active commuting	32.86282561
Social	—
2-parent households	70.47350186
Voting	76.18375465
Neighborhood	—
Alcohol availability	91.91582189
Park access	53.67637624
Retail density	14.83382523
Supermarket access	17.56704735
Tree canopy	19.82548441
Housing	—
Homeownership	87.93789298
Housing habitability	80.5338124
Low-inc homeowner severe housing cost burden	50.00641601
Low-inc renter severe housing cost burden	61.01629668
Uncrowded housing	70.21686129
Health Outcomes	—
Insured adults	70.06287694
Arthritis	81.7

Asthma ER Admissions	90.9
High Blood Pressure	90.4
Cancer (excluding skin)	63.4
Asthma	69.3
Coronary Heart Disease	87.2
Chronic Obstructive Pulmonary Disease	76.7
Diagnosed Diabetes	79.4
Life Expectancy at Birth	85.3
Cognitively Disabled	78.9
Physically Disabled	94.1
Heart Attack ER Admissions	88.4
Mental Health Not Good	61.1
Chronic Kidney Disease	85.5
Obesity	71.5
Pedestrian Injuries	42.0
Physical Health Not Good	74.9
Stroke	88.3
Health Risk Behaviors	—
Binge Drinking	16.3
Current Smoker	61.3
No Leisure Time for Physical Activity	65.6
Climate Change Exposures	—
Wildfire Risk	53.8
SLR Inundation Area	0.0
Children	14.1
Elderly	76.6
English Speaking	35.0
Foreign-born	48.4

Outdoor Workers	72.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	74.4
Traffic Density	32.8
Traffic Access	23.0
Other Indices	—
Hardship	40.9
Other Decision Support	—
2016 Voting	79.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	19
Healthy Places Index Score for Project Location (b)	71
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

8.1. Justifications

Screen	Justification
Construction: Construction Phases	Construction Schedule
Construction: Off-Road Equipment	CE - T3 Design Feature
Construction: Off-Road Equipment EF	Welders and Compressors are electric
Operations: Vehicle Data	Based on the SANDAG trip generation rate of 60 ADT per acre for a 56-acre high school site, a total of 3,360 ADT was estimated. Since CalEEMod inputs require land use data in terms of students, building size, or employees, the 3,360 ADT was converted using SANDAG's rate of 1.3 ADT per student, resulting in approximately 2,585 students. This was validated by the Project Traffic Engineer (LLG).
Operations: Hearths	No Hearth options will be installed