# Karve Ski Park Project

## Air Quality Technical Report

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# Acronyms and Abbreviations

| | |
|---|---|
| °F | degrees Fahrenheit |
| $\mu g/m^3$ | micrograms per cubic meter |
| | |
| AAM | Annual Arithmetic Mean |
| ADA | Americans with Disabilities Act |
| APN | Assessor's Parcel Number |
| AQIA | Air Quality Impact Assessment |
| Attainment Plan | 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County |
| BMP | best management practice |
| | |
| CAA | Clean Air Act (Federal) |
| CAAQS | California Ambient Air Quality Standard |
| CalEEMod | California Emission Estimator Model |
| CalEPA | California Environmental Protection Agency |
| CAPCOA | California Air Pollution Control Officers Association |
| CARB | California Air Resources Board |
| CCAA | California Clean Air Act |
| CEQA | California Environmental Quality Act |
| CO | carbon monoxide |
| County | County of San Diego |
| CY | cubic yard |
| | |
| DPM | diesel particulate matter |
| | |
| GHG | greenhouse gas |
| | |
| $H_2S$ | hydrogen sulfide |
| | |
| I-15 | Interstate 15 |
| | |
| lbs | pounds |
| LOS | level of service |
| | |
| $mg/m^3$ | milligrams per cubic meter |
| mph | miles per hour |
| | |
| NAAQS | National Ambient Air Quality Standard |
| $NO_2$ | nitrogen dioxide |
| $NO_X$ | oxides of nitrogen |
| | |
| $O_3$ | ozone |
| OEHHA | Office of Environmental Health Hazard Assessment |

# Acronyms and Abbreviations (cont.)

| | |
|---|---|
| PM | particulate matter |
| $PM_{10}$ | coarse particulate matter (particulate matter 10 microns or less in diameter) |
| $PM_{2.5}$ | fine particulate matter (particulate matter 2.5 microns or less in diameter) |
| ppm | parts per million |
| project | Karve Ski Park Project |
| RAQS | Regional Air Quality Strategy |
| ROG | reactive organic gas |
| SANDAG | San Diego Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SDAB | San Diego Air Basin |
| SDAPCD | San Diego County Air Pollution Control District |
| SIP | State Implementation Plan |
| SLT | screening-level threshold |
| $SO_2$ | sulfur dioxide |
| $SO_X$ | oxides of sulfur |
| TACs | toxic air contaminants |
| USEPA | U.S. Environmental Protection Agency |
| VMT | vehicle miles traveled |
| VOC | volatile organic compound |
| WRCC | Western Regional Climate Center |

# EXECUTIVE SUMMARY

This report presents an assessment of potential air quality impacts associated with the proposed Karve Ski Park Project (project). The project proposes to develop a 10.45-acre synthetic ski park (also known as a dry ski slope) located at 26351 North Centre City Parkway in the unincorporated Jesmond Dene community north of the City of Escondido within the North County Metro community planning area of San Diego County. The ski park would be an outdoor, year-round synthetic snow sports facility and recreational park catering to all ages, abilities, and skill levels. The primary activities would be the ones that take place at the artificial ski slope which mimics the attributes of snow for both day and nighttime skiing and snowboarding. This report presents an evaluation addressing the potential for air pollutant emissions during the construction and operation of the project.

The project would result in emissions of air pollutants during the construction and operational phases of the project. Construction best management practices (BMPs) would be implemented by the project, including measures to minimize fugitive dust emissions, such as watering twice per day. With the inclusion of these BMPs, emissions of all criteria pollutants would be below the daily thresholds during the construction and operation of the project, and impacts would be less than significant.

Development of the project would not conflict with the San Diego County Air Pollution Control District's (SDAPCD's) Regional Air Quality Strategy (RAQS) and *Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County* (Attainment Plan) and would not result in cumulatively considerable emissions of nonattainment air pollutants that would exceed the screening level thresholds.

The project would not result in the exposure of sensitive receptors to substantial emissions of pollutants, toxic air contaminants, or odors. The project would not result in the degradation of roadway intersections such that emissions of carbon monoxide (CO) would result in a CO hotspot. Construction activities and project operations would not expose substantial numbers of people to objectionable odors.

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# 1.0 INTRODUCTION

This report analyzes potential air quality impacts associated with the proposed Karve Ski Park Project (project), which includes an evaluation of existing conditions in the project vicinity and an assessment of potential impacts associated with project construction and project operation. The analysis of impacts and report is prepared in accordance with the County of San Diego (County) Guidelines for Determining Significance and Report Content and Format Requirements for Air Quality (County 2007).

## 1.1 PROJECT LOCATION

The project site is located at 26351 North Centre City Parkway in the unincorporated Jesmond Dene community north of the City of Escondido within the North County Metro community planning area of San Diego County. The project site is largely undeveloped and currently in operation as a golf driving range and batting cage. The project location lies east of Interstate 15 (I-15), south of the Deer Springs Road/Mountain Meadow Road exit. The project area is bordered by Tierra Libertia Road to the north, Jesmond Dene Road to the south and southwest, North Centre City Parkway to the west, and residential parcels to the east. The approximately 10.45-acre project site consists of Assessor's Parcel Numbers (APNs) 187-630-12-00 and 187-322-29-00. See Figure 1, *Regional Location*, and Figure 2, *Aerial Photograph*.

## 1.2 PROJECT DESCRIPTION

The project proposes to construct an outdoor recreation facility consisting of a dry slope for skiing, snowboarding, and inner tubing. Proposed recreation features include three slopes of artificial synthetic material, a zipline and jump tower, a golf driving range, and a "magic carpet" lift station to transport guests to the top of the slopes. Four buildings totaling 9,525 square feet would provide associated amenities, including a box office, guest services, management offices, and a first aid station; a food court and bar with Americans with Disabilities Act (ADA)-compliant restrooms; an equipment rental and event room space; and a maintenance and storage shed. The northwestern portion of the property would be converted to a 146-space parking lot. See Figure 3, *Site Plan*. As part of the project, best management practices (BMPs) would be incorporated to control fugitive dust during project construction activities, see Section 1.3, below.

## 1.3 FUGITIVE DUST REGULATORY REQUIREMENTS AND BEST MANAGEMENT PRACTICES

The project would incorporate BMPs during construction to reduce emissions of fugitive dust. San Diego County Air Pollution Control District (SDAPCD) Rule 55 – Fugitive Dust Control states that no dust and/or dirt shall leave the property line, as follows (SDAPCD 2005):

1. **Airborne Dust Beyond the Property Line:** No person shall engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.

2. **Track-Out/Carry-Out:** Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall:

   (i) be minimized by the use of any of the following or equally effective track-out/carry-out and erosion control measures that apply to the project or operation:

      (a) track-out grates or gravel beds at each egress point;

      (b) wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks;

      (c) using secured tarps or cargo covering, watering, or treating of transported material; and

   (ii) be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only respirable particulate matter ($PM_{10}$) -efficient street sweepers certified to meet the most current South Coast Air Quality Management District (SCAQMD) Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances.

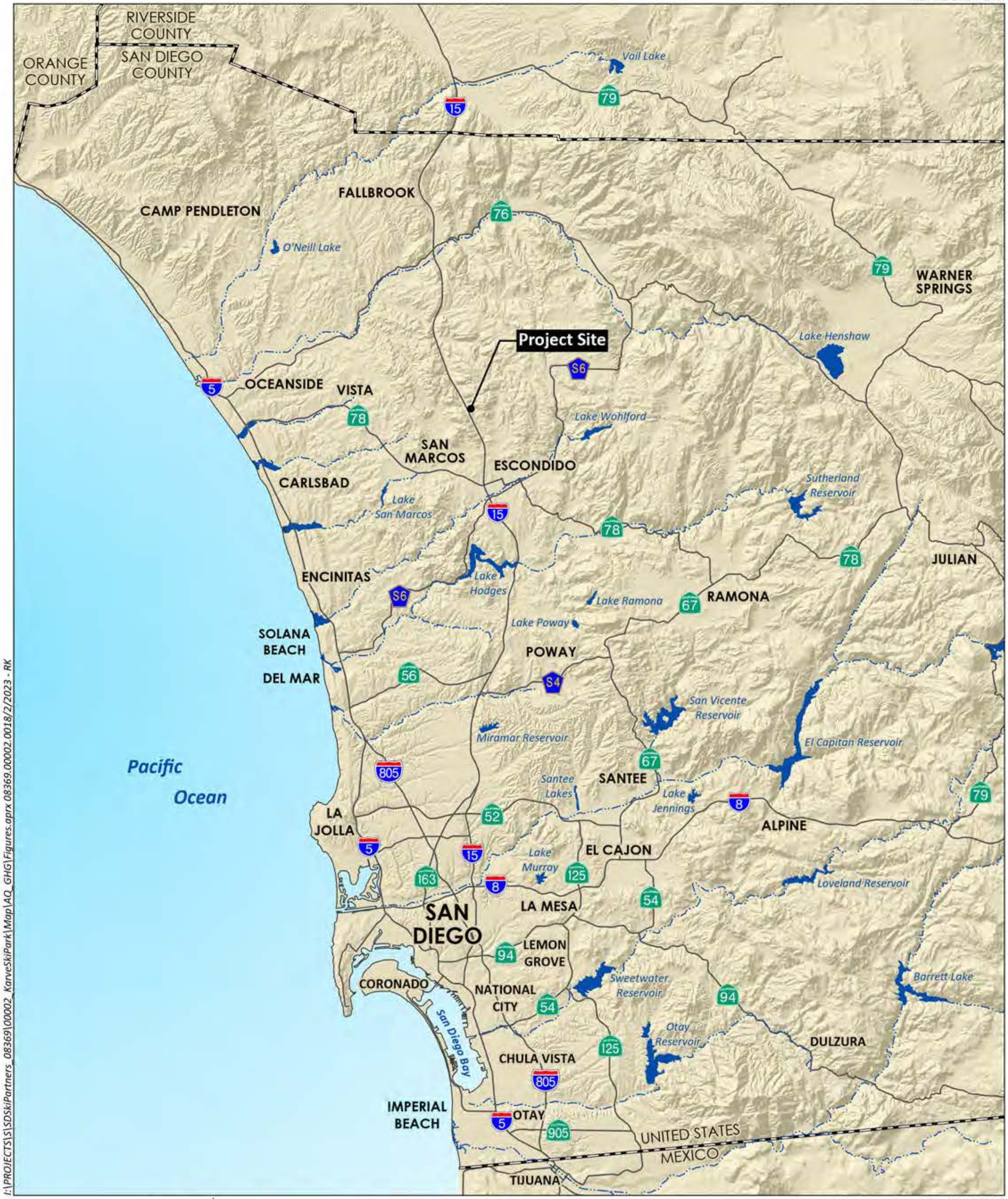
As part of the project the BMP control measures listed below would be implemented during project construction activities to meet the requirements of SDAPCD Rule 55:

- Dirt and aggregate storage piles shall be stabilized by chemical binders, tarps, fencing, or other erosion control.
- A 15-mile per hour (mph) speed limit shall be enforced on unpaved surfaces.
- During dry weather, dirt and debris spilled onto paved surfaces shall be removed promptly to reduce the resuspension of particulate matter caused by vehicle movement. Track out of material onto public roads shall be cleaned daily during dry weather.
- Trucks hauling dirt, sand, soil, or other loose materials shall be covered, or two feet of freeboard will be maintained.
- Ground disturbance shall be terminated if winds exceed 25 mph.
- All exposed areas shall be watered a minimum of twice per day.

# 2.0 EXISTING CONDITIONS

## 2.1 EXISTING SETTING

The project site is largely undeveloped and currently in operation as a golf driving range and batting cage. Observations from the site visit conducted for the Cultural Resources Survey Report noted that thick vegetation covers the entire site, and a push pile of rocks was observed at the top of a hill in the southern portion of the project area (HELIX 2023a). There is also a small asphalt parking lot located in the northwest corner of the site.

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Source: Base Map Layers (SanGIS, 2016)

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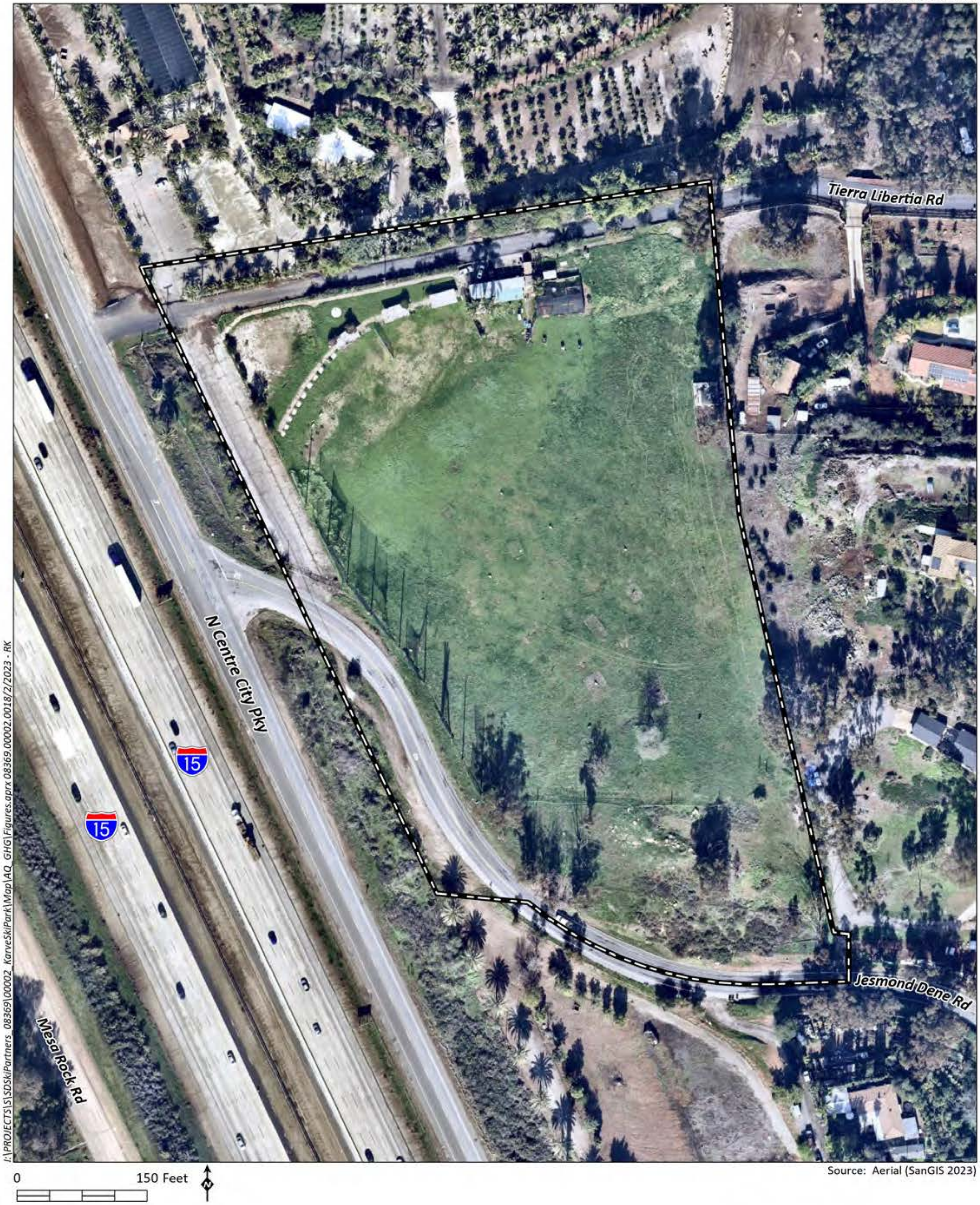
# Regional Location

Figure 1




Source: Aerial (SanGIS 2023)

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# Aerial Photograph

Figure 2


Source: Howard Associates 2024

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## Site Plan

Figure 3

### 2.1.1 Sensitive Receptors

The California Air Resources Board (CARB) and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005, OEHHA 2015). Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers.

The closest existing sensitive receptors to the project site are single-family residences located adjacent to the eastern project boundary with the closest habitable structures being approximately 120 feet from the property line. There are no daycare centers, schools, hospitals, or senior care facilities within one mile of the project site.

## 2.2 CLIMATE / METEOROLOGY AND TEMPERATURE INVERSIONS

The climate in southern California, including the San Diego Air Basin (SDAB), is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. Areas within 30 miles of the coast experience moderate temperatures and comfortable humidity.

The annual average maximum temperature in the project area is approximately 77 degrees Fahrenheit (°F), and the average minimum temperature is approximately 52°F. Total precipitation in the project area averaged approximately 15 inches between 1979 and 2013. Precipitation occurs mostly during the winter and relatively infrequently during the summer (Western Regional Climate Center [WRCC] 2023).

Due to its climate, the SDAB experiences frequent temperature inversions (temperature increases as altitude increases, which is the opposite of general patterns). Temperature inversions prevent air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere, creating a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and nitrogen dioxide ($NO_2$) react under strong sunlight, creating smog. Light, daytime winds, predominantly from the west, further aggravate the condition by driving the air pollutants inland, toward the foothills. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and $NO_2$ emissions. High $NO_2$ levels usually occur during autumn or winter, on days with summer-like conditions.

## 2.3 AIR POLLUTANTS OF CONCERN

### 2.3.1 Criteria Air Pollutants

Six air pollutants have been identified by the U.S. Environmental Protection Agency (USEPA) and CARB as being of concern both on a nationwide and statewide level: ground-level ozone ($O_3$), CO, $NO_2$, sulfur dioxide ($SO_2$), lead, and particulate matter (PM), which is subdivided into two classes based on particle size: coarse PM equal to or less than 10 microns in diameter ($PM_{10}$) and fine PM equal to or less than 2.5 microns in diameter ($PM_{2.5}$). These air pollutants are commonly referred to as "criteria air pollutants" because air quality standards are regulated using human health and environmentally based criteria. Criteria pollutants can be emitted directly from sources (primary pollutants; e.g., CO, $SO_2$, $PM_{10}$, $PM_{2.5}$, and lead), or they may be formed through chemical and photochemical reactions of precursor pollutants (secondary pollutants; e.g., ozone and $NO_2$) in the atmosphere. The principal precursor pollutants of concern are reactive organic gasses ([ROGs] also known as volatile organic compounds [VOCs])[1] and nitrogen oxides ($NO_X$).

The descriptions of sources and general health effects for each of the criteria air pollutants are shown in Table 1, *Summary of Common Sources and Human Health Effects of Criteria Air Pollutants,* based on information provided by the California Air Pollution Control Officers Association ([CAPCOA]; 2023). Specific adverse health effects to individuals or population groups induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals [e.g., age, gender]). Criteria pollutant precursors (ROG and $NO_X$) affect air quality on a regional scale, typically after significant delay and distance from the pollutant source emissions. Health effects related to ozone and $NO_2$ are, therefore, the product of emissions generated by numerous sources throughout a region. As such, specific health effects from these criteria pollutant emissions cannot be directly correlated to the incremental contribution from a single project.

**Table 1**
**SUMMARY OF COMMON SOURCES AND HUMAN HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS**

| Pollutant | Major Man-Made Sources | Human Health Effects |
|---|---|---|
| Carbon Monoxide (CO) | An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust. | Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous systems. Impairs vision, causes dizziness, and can lead to unconsciousness or death. |
| Nitrogen Dioxide ($NO_2$) | A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel. | Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to climate change and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere. |
| Ozone ($O_3$) | Formed by a chemical reaction between reactive organic gases (ROGs) and nitrogen oxides ($NO_X$) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills. | Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles, and dyes. |

1 CARB defines and uses the term ROGs while the USEPA defines and uses the term VOCs. The compounds included in the lists of ROGs and VOCs and the methods of calculation are slightly different. However, for the purposes of estimating criteria pollutant precursor emissions, the two terms are often used interchangeably.

| Pollutant | Major Man-Made Sources | Human Health Effects |
|---|---|---|
| Particulate Matter ($PM_{10}$ and $PM_{2.5}$) | Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and other sources. | Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze). |
| Sulfur Dioxide ($SO_2$) | A colorless, nonflammable gas formed when fuel containing sulfur is burned, when gasoline is extracted from oil, or when metal is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships. | Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron, and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain. |
| Lead | Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries. | Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems. |

Source: CAPCOA 2023.

### 2.3.2 Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness or that may pose a present or potential hazard to human health. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye-watering, respiratory irritation (a cough), runny nose, throat pain, and headaches. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For carcinogenic TACs, there is no level of exposure that is considered safe, and impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

The Health and Safety Code (§39655, subdivision (a) defines a TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.” A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the Federal Clean Air Act (CAA) (42 United States Code Section 7412[b]) is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as diesel particulate matter (DPM). Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is less than 2.5 microns in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, the CARB identified DPM as a toxic air contaminant based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a significant impact on California's population—it is estimated that about 70 percent of the total known cancer risk related to air toxics in California is attributable to DPM (CARB 2023).

### 2.3.3 Odors

Odor issues are very subjective by the nature of odors themselves and their measurements are difficult to quantify. The ability to detect odors varies considerably among the population and people may have different reactions to the same odor. While offensive odors rarely cause physical harm, they can be unpleasant, leading to quality of life and sleep issues for affected individuals.

SDAPCD Rule 51, *Nuisance*, and California Health & Safety Code, Division 26, Part 4, Chapter 3, §41700 prohibit the emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health or safety of the public. Some land uses are known to generate odors objectionable to most people including wastewater treatment plants, sanitary landfills, composting/ green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants. Projects required to obtain permits from the SDAPCD, typically industrial and some commercial projects, are evaluated by the SDAPCD for potential odor nuisance and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance (County 2007).

## 2.4 REGULATORY SETTING

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to the health and welfare of the general public. The USEPA is responsible for enforcing the Federal CAA of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established primary and secondary standards for criteria pollutants. Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere. The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. CARB has established the more stringent California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants through the California Clean Air Act of 1988 (CCAA), and has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide ($H_2S$), vinyl chloride and visibility-reducing particles. Table 2, *California and National Ambient Air Quality Standards,* shows the federal and state ambient air quality standards.

**Table 2**
**CALIFORNIA AND NATIONAL AMBIENT AIR QUALITY STANDARDS**

| Pollutant | Averaging Time | California Standards | Federal Standards Primary[1] | Federal Standards Secondary[2] |
|---|---|---|---|---|
| $O_3$ | 1 Hour | 0.09 ppm (180 µg/$m^3$) | – | – |
| | 8 Hour | 0.070 ppm (137 µg/$m^3$) | 0.070 ppm (137 µg/$m^3$) | Same as Primary |
| $PM_{10}$ | 24 Hour | 50 µg/$m^3$ | 150 µg/$m^3$ | Same as Primary |
| | AAM | 20 µg/$m^3$ | – | Same as Primary |
| $PM_{2.5}$ | 24 Hour | – | 35 µg/$m^3$ | Same as Primary |
| | AAM | 12 µg/$m^3$ | 9.0 µg/$m^3$ | 15.0 µg/$m^3$ |
| CO | 1 Hour | 20 ppm (23 mg/$m^3$) | 35 ppm (40 mg/$m^3$) | – |
| | 8 Hour | 9.0 ppm (10 mg/$m^3$) | 9 ppm (10 mg/$m^3$) | – |
| | 8 Hour (Lake Tahoe) | 6 ppm (7 mg/$m^3$) | – | – |
| $NO_2$ | 1 Hour | 0.18 ppm (339 µg/$m^3$) | 0.100 ppm (188 µg/$m^3$) | – |
| | AAM | 0.030 ppm (57 µg/$m^3$) | 0.053 ppm (100 µg/$m^3$) | Same as Primary |
| $SO_2$ | 1 Hour | 0.25 ppm (655 µg/$m^3$) | 0.075 ppm (196 µg/$m^3$) | – |
| | 3 Hour | – | – | 0.5 ppm (1,300 µg/$m^3$) |
| | 24 Hour | 0.04 ppm (105 µg/$m^3$) | – | – |
| Lead | 30-day Avg. | 1.5 µg/$m^3$ | – | – |
| | Calendar Quarter | – | 1.5 µg/$m^3$ | Same as Primary |
| | Rolling 3-month Avg. | – | 0.15 µg/$m^3$ | Same as Primary |
| Visibility Reducing Particles | 8 Hour | Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe) | No Federal Standards | No Federal Standards |
| Sulfates | 24 Hour | 25 µg/$m^3$ | No Federal Standards | No Federal Standards |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm (42 µg/$m^3$) | No Federal Standards | No Federal Standards |
| Vinyl Chloride | 24 Hour | 0.01 ppm (26 µg/$m^3$) | No Federal Standards | No Federal Standards |

Source: CARB 2016; USEPA 2024.

1 National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect public health.

2 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

$O_3$ = ozone; ppm: parts per million; µg/$m^3$ = micrograms per cubic meter; $PM_{10}$ = particulate matter 10 microns or less in diameter; AAM = Annual Arithmetic Mean; $PM_{2.5}$ = fine particulate matter 2.5 microns or less in diameter; CO = carbon monoxide; mg/$m^3$ = milligrams per cubic meter; $NO_2$ = nitrogen dioxide; $SO_2$ = sulfur dioxide; km = kilometer; – = No Standard.

Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be "nonattainment areas" for that pollutant. The area air quality attainment status of the SDAB is shown in Table 3, *San Diego Air Basin Attainment Status*. On July 2, 2021, the SDAB was classified as a Severe-15 nonattainment area for the 8-hour NAAQS for ozone (SDAPCD 2023a). The SDAB is an attainment area or unclassified for the NAAQS for all other criteria pollutants, including $PM_{10}$ and $PM_{2.5}$.

**Table 3**
**SAN DIEGO AIR BASIN ATTAINMENT STATUS**

| Pollutant | State of California Attainment Status | Federal Attainment Status |
|---|---|---|
| Ozone (1-hour) | Nonattainment | Attainment |
| Ozone (8-hour) | Nonattainment | Severe-15 Nonattainment |
| Coarse Particulate Matter ($PM_{10}$) | Nonattainment | Unclassifiable[1] |
| Fine Particulate Matter ($PM_{2.5}$) | Nonattainment | Attainment |
| Carbon Monoxide (CO) | Attainment | Attainment |
| Nitrogen Dioxide ($NO_2$) | Attainment | Attainment |
| Lead | Attainment | Attainment |
| Sulfur Dioxide ($SO_2$) | Attainment | Attainment |
| Sulfates | Attainment | No Federal Standard |
| Hydrogen Sulfide | Unclassified | No Federal Standard |
| Visibility Reducing Particles | Unclassified | No Federal Standard |

Source: SDAPCD 2023a.
[1] At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

CARB is the state regulatory agency with the authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations for the County.

The SDAPCD and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for the attainment and maintenance of the ambient air quality standards in the SDAB. The regional air quality plan for San Diego County for attainment of the NAAQS is SDAPCD's *2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County* (Attainment Plan; SDAPCD 2020). The Attainment Plan, which would be a revision to the SIP, outlines SDAPCD's strategies and control measures designed to attain the NAAQS for ozone. For the attainment of the CAAQS, the SDAPCD must prepare an updated State Ozone Attainment Plan to identify possible new actions to further reduce emissions. Initially adopted in 1992, the Regional Air Quality Strategy (RAQS) identifies measures to reduce emissions from sources regulated by the SDAPCD, primarily stationary sources such as industrial operations and manufacturing facilities. The RAQS is periodically updated to reflect updated information on air quality, emission trends, and new feasible control measures, and was last updated in 2023 (SDAPCD 2023b). These plans accommodate emissions from all sources, including natural sources, through the implementation of control measures, where feasible, on stationary sources to attain the standards. Mobile sources are regulated by the USEPA and CARB, and the emissions and reduction strategies related to mobile sources are considered in the Attainment Plan and RAQS. The Attainment Plan and RAQS, in combination with local plans from all other California nonattainment areas with serious (or worse) air quality problems, are submitted to the CARB, which develops the California State Implementation Plan (SIP).

The Attainment Plan and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County as part of the development of the County's General Plan.

## 2.5 AMBIENT AIR QUALITY

The SDAPCD operates a network of ambient air monitoring stations throughout the County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The El Cajon-Lexington Elementary School Monitoring Station, located at 533 First Street in El Cajon, approximately 28 miles south of the project site is in an inland valley and is representative of the climatological and topographical conditions at the project site. At the time of this analysis, $PM_{10}$ monitoring data in San Diego County was limited and no data for the sample period was available. Air quality data are shown on Table 4, *Air Quality Monitoring Data.*

**Table 4**
**AIR QUALITY MONITORING DATA**

| Pollutant Standard | 2020 | 2021 | 2022 |
|---|---|---|---|
| **Ozone ($O_3$) – El Cajon Station** | | | |
| Maximum concentration 1-hour period (ppm) | 0.094 | 0.088 | 0.100 |
| Maximum concentration 8-hour period (ppm) | 0.083 | 0.077 | 0.088 |
| Days above 1-hour state standard (>0.09 ppm) | 0 | 0 | 1 |
| Days above 8-hour state/federal standard (>0.070 ppm) | 14 | 3 | 2 |
| **Fine Particulate Matter ($PM_{2.5}$) – El Cajon Station** | | | |
| Maximum 24-hour concentration (µg/m$^3$) | 41.6 | 31.5 | 27.3 |
| Measured Days above 24-hour federal standard (>35 µg/m$^3$) | 2 | 0 | 0 |
| Annual average (µg/m$^3$) | 10.3 | 9.7 | 8.9 |
| Exceed federal annual standard (9.0 µg/m$^3$) | Yes | Yes | No |
| **Nitrogen Dioxide ($NO_2$) – El Cajon Station** | | | |
| Maximum 1-hour concentration (ppm) | 0.044 | 0.038 | 0.036 |
| Days above state 1-hour standard (0.18 ppm) | 0 | 0 | 0 |
| Days above federal 1-hour standard (0.100 ppm) | 0 | 0 | 0 |
| Annual average (ppm) | 0.008 | 0.006 | 0.008 |
| Exceed annual federal standard (0.053 ppm) | No | No | No |
| Exceed annual state standard (0.030 ppm) | No | No | No |

Source: CARB 2024.
ppm = parts per million; µg/m$^3$ = micrograms per cubic meter, * = insufficient data available.

Monitoring data at El Cajon-Lexington Elementary School Monitoring Station show exceedance of the state one-hour standard for ozone occurred once in 2022. Exceedance of the state and federal eight-hour standards for ozone occurred on 14 days in 2020, 3 days in 2021, and 2 days in 2022. Exceedance of the federal daily standard for $PM_{2.5}$ occurred twice in 2020 and the 2024 federal annual standard for $PM_{2.5}$ was exceeded in 2020 and 2021.

# 3.0 SIGNIFICANCE CRITERIA AND ANALYSIS METHODOLOGIES

## 3.1 SIGNIFICANCE CRITERIA

The County (2007) has approved guidelines for determining significance (County Guidelines) based on Appendix G.III of the State California Environmental Quality Act (CEQA) Guidelines, which provide guidance that a project would have a significant environmental impact if it would:

1. Conflict with or obstruct the implementation of the San Diego RAQS or Attainment Plan;
2. Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation;
3. Result in a cumulatively considerable net increase for which the SDAB is in non-attainment of NAAQS or CAAQS;
4. Expose sensitive receptors (including, but not limited to, residences, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations; and/or
5. Create objectionable odors affecting a substantial number of people.

To determine whether a project would (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation, or (b) result in a cumulatively considerable net increase of $PM_{10}$ or exceed quantitative thresholds for ozone precursors, $NO_X$ and ROGs, project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD. The County has adopted, as screening-level thresholds (SLTs), the Air Quality Impact Analysis (AQIA) trigger levels for new or modified stationary sources from the SDAPCD Rules 20.2 and 20.3 (SDAPCD 2019a; 2019b). The County has also adopted the SCAQMD's screening threshold of 55 pounds (lbs.) per day or 10 tons per year as a significance threshold for $PM_{2.5}$ (SCAQMD 2015).

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. The screening thresholds are included in Table 5, *Screening-Level Thresholds for Air Quality Impact Analysis.*

**Table 5**
**SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS**

| Pollutant | Total Emissions |
|---|---|
| **Construction Emissions** | |
| | **Pounds per Day** |
| Coarse Particulate Matter ($PM_{10}$) | 100 |
| Fine Particulate Matter ($PM_{2.5}$) | 55 |
| Oxides of Nitrogen ($NO_X$) | 250 |
| Oxides of Sulfur ($SO_X$) | 250 |
| Carbon Monoxide (CO) | 550 |
| Volatile Organic Compounds (VOCs) | 75 |

| Pollutant | Total Emissions | | |
|---|---|---|---|
| **Operational Emissions** | | | |
| | **Pounds per Hour** | **Pounds per Day** | **Tons per Year** |
| Coarse Particulate Matter ($PM_{10}$) | --- | 100 | 15 |
| Fine Particulate Matter ($PM_{2.5}$) | --- | 55 | 10 |
| Oxides of Nitrogen ($NO_X$) | 25 | 250 | 40 |
| Oxides of Sulfur ($SO_X$) | 25 | 250 | 40 |
| Carbon Monoxide (CO) | 100 | 550 | 100 |
| Lead and Lead Compounds | --- | 3.2 | 0.6 |
| Volatile Organic Compounds (VOC) | --- | 75 | 13.7 |
| **Toxic Air Contaminant Emissions** | | | |
| Excess Cancer Risk | 10 in 1 million | | |
| Non-Cancer Hazard Index | 1.0 | | |

Source: County 2007; SDAPCD 2019a, 2019b; SCAQMD 2015.

## 3.2 METHODOLOGY

The air quality impact analysis contained in this report was prepared in accordance with the methodologies provided by the County as included in the *Guidelines for Determining Significance and Report Format and Content Requirements for Air Quality* (County 2007).

Criteria pollutant emissions for project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model was developed for CAPCOA in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and default input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices (CAPCOA 2022). The input data and subsequent construction and operation emission estimates for the proposed project are discussed below. CalEEMod output files for the project are included in Appendix A of this report.

### 3.2.1 Project Construction

Construction emissions were modeled using CalEEMod, as described above. Default data sources in CalEEMod for construction emissions include construction surveys, off-road equipment emissions factors from CARB's OFFROAD2017 emissions inventory, and on-road emissions factors for CARB's EMFAC2019 emissions inventory. The complete calculation methodology and sources of data used in CalEEMod can be found in the CalEEMod User's Guide, and Appendices C, D, F, and G to the User's Guide (CAPCOA 2022).

Construction emissions calculations were based on CalEEMod defaults, and the estimated construction activity durations provided by the project engineers. The emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction activity is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of: (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in CalEEMod; and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

Although it was assumed that all of the dust control measures listed in Section 1.3 of this report would be implemented to model the most conservative construction estimates, only the application of water twice per day was taken into consideration.

#### 3.2.1.1 Construction Activities

Project construction activities would include site preparation and clearing, grading, physical building construction, paving, and architectural coating. As discussed previously, the project site is largely undeveloped and would, therefore, not require independent demolition activities. Project grading activities would include the export of 390 cubic (CY) yards of material and detailed contouring of the slope. The construction schedule assumed in the modeling is shown in Table 6, *Anticipated Construction Schedule*.

**Table 6**
**ANTICIPATED CONSTRUCTION SCHEDULE**

| Construction Activity | Construction Period Start | Construction Period End | Number of Working Days |
|---|---|---|---|
| Site Preparation | 1/1/2026 | 1/14/2026 | 10 |
| Grading | 1/15/2026 | 4/15/2026 | 65 |
| Building Construction | 4/16/2026 | 6/15/2027 | 304 |
| Paving | 6/16/2027 | 7/13/2027 | 20 |
| Architectural Coatings | 7/14/2027 | 8/10/2027 | 20 |

Source: Project Engineer; CalEEMod.

#### 3.2.1.2 Construction Off-Road Equipment

Construction would require the use of heavy off-road equipment. Construction equipment estimates are based on input from the project engineer and default values in CalEEMod. Table 7, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

**Table 7**
**CONSTRUCTION EQUIPMENT ASSUMPTIONS**

| Equipment | Horsepower | Number | Hours/Day |
|---|---|---|---|
| **Site Preparation** | | | |
| Rubber Tired Dozer | 367 | 3 | 8 |
| Tractor/Loader/Backhoe | 84 | 4 | 8 |
| **Grading/Excavation** | | | |
| Excavators | 36 | 2 | 8 |
| Grader | 148 | 1 | 8 |
| Rubber Tired Dozer | 367 | 1 | 8 |
| Scraper | 423 | 2 | 8 |
| Tractor/Loader/Backhoe | 84 | 2 | 8 |

| Equipment | Horsepower | Number | Hours/Day |
|---|---|---|---|
| **Building Construction** | | | |
| Cranes | 367 | 1 | 7 |
| Forklifts | 82 | 3 | 8 |
| Generator Set | 14 | 1 | 8 |
| Tractor/Loader/Backhoe | 84 | 3 | 7 |
| Welder | 46 | 1 | 8 |
| **Paving** | | | |
| Pavers | 81 | 2 | 8 |
| Paving Equipment | 89 | 2 | 8 |
| Rollers | 36 | 2 | 8 |
| **Architectural Coating** | | | |
| Air Compressors | 37 | 1 | 6 |

Source: Project Engineer; CalEEMod (complete data is provided in Appendix A of this report).

#### 3.2.1.3 Construction On-Road Trips

Worker commute trips and vendor delivery trips were modeled based on CalEEMod defaults. Worker trips are anticipated to vary between 2 and 20 trips per day, depending on construction activity. Worker trips used the default one-way trip distance of 11.97 miles. Vendor delivery trips would be 1 per day during building construction. Vendor trips used the default one-way trip distance of 7.63 miles.

Per the project engineer, approximately 390 CY of soil (approximately 1 truckload per day) would be exported from the site during grading/excavation.

### 3.2.2 Project Operations

Operational emissions were modeled using CalEEMod, as described above.

#### 3.2.2.1 Modeled Land Uses

Project land uses were modeled based on the project description and project plan provided by the project engineer/architect. The project's main land use would be "Outdoor Recreational Park" which was modeled within CalEEMod as City Park. Of the four buildings being proposed, Buildings A, C, and D were included in the City Park land use line item as 5,400 square feet of recreational building area. The 4,125-square-foot Pavilion (Building B) was modeled as a fast-food restaurant without drive through. The model also analyzed the development of the 146-space parking lot.

#### 3.2.2.2 Area Source Emissions

Area sources include emissions from landscaping equipment, the use of consumer products, and the reapplication of architectural coatings for maintenance. Emissions associated with the architectural coating applied for maintenance were modeled using the CalEEMod default assumption of 10 percent of surface areas coated each year. CalEEMod default values for landscaping equipment and consumer products were used.

#### 3.2.2.3 Energy Emissions

Development within the project would use electricity for lighting, heating, and cooling. Direct emissions from the burning of natural gas may result from furnaces and hot water heaters. A portion of the electricity generation typically entails the combustion of fossil fuels, including natural gas and coal, which occurs at the power plant(s). A building's electricity use is thus associated with off-site or indirect emissions at the source of electricity generation, and these emissions are not included in the analysis of a land use development project's local or regional air quality impacts. The project energy use was modeled using CalEEMod defaults adjusted to account for an all-electric development. That is, the default energy assumed in CalEEMod to be consumed through the combustion of natural gas was converted to equal amounts of electric energy and added to the default CalEEMod assumed electric consumption.

#### 3.2.2.4 Vehicular (Mobile) Sources

Operational emissions from mobile sources are associated with project-related vehicle trip generation and trip length. Project trip generation was estimated by CR Associates per the County of San Diego's Transportation Study Guidelines based on rates outlined in the Institute of Transportation Engineer's Trip Generation Manual, 11th Edition. It was estimated the project would generate 526 average daily trips with 29 morning peak trips and 55 afternoon peak trips (CR Associates 2023b). The CalEEMod default trip distances, purposes, and fleet mix were used.

# 4.0 PROJECT IMPACT ANALYSIS

## 4.1 CONFORMANCE TO THE REGIONAL AIR QUALITY STRATEGY

### 4.1.1 Guideline for the Determination of Significance

*Would the project conflict with or obstruct the implementation of the San Diego RAQS or Attainment Plan?*

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

The RAQS relies on information from the CARB and SANDAG, including projected growth in the County, mobile, area, and all other source emissions to project future emissions and determine from that the strategies necessary for the reduction of stationary source emissions through regulatory controls. The CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and the County.

As such, projects that propose development that is consistent with the growth anticipated by the local jurisdictions' general plans would be consistent with the RAQS. In the event that a project proposes development that is less dense than anticipated within the General Plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the

County General Plan and SANDAG's growth projections upon which the RAQS and Attainment Plan are based, the project would be in conflict with the RAQS and Attainment Plan and may have a potentially significant impact on air quality.

### 4.1.2 Significance of Impacts Prior to Mitigation

The project site is currently zoned as A70, Limited Agriculture, and has a General Plan land use designation of Semi-Rural Residential. The project's proposed outdoor recreation park is an allowed use under the current zoning and would not require a rezone or a General Plan amendment to change the land use designation. However, the project is requesting the approval of a major use permit and, therefore, may result in a more intense development than was assumed in the RAQS and Attainment Plan. The project is not a large employment center that would create a substantial number of jobs, nor does it include any residential uses; therefore, the project would not substantially increase population beyond SANDAG's growth forecasts. The RAQS and Attainment Plan rely on the same information from the SANDAG growth forecast to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin. Because the project would not generate population growth beyond the levels assumed for the region, the project would not conflict with any population projections for the region and would, therefore, be consistent with the RAQS and Attainment Plan. In addition, as detailed in Section 4.2, below, the project would not result in a significant air quality impact with regard to emissions of ozone precursors or criteria air pollutants.

Another measurement tool in determining consistency with the RAQS and Attainment Plan is to determine how a project accommodates the expected increase in population or employment. Generally, if a project is planned in a way that results in the minimization of vehicle miles traveled (VMT) both within the project and the community in which it is located, and consequently the minimization of air pollutant emissions, that aspect of the project is consistent with the RAQS and Attainment Plan. Per the analysis prepared by the project's traffic engineer, CR Associates, the project is anticipated to shorten trips made by San Diego County residents associated with skiing by largely internalizing these trips within the County. In other words, the project would shorten and reduce VMT by providing a ski facility within San Diego County and shortening the typical trips to farther, larger ski parks (CR Associates 2023a). This reduction in regional VMT supports the goals and strategies of SANDAG's Regional Plan and Sustainable Communities Strategy. As such, the project would be consistent with the goals of the RAQS and Attainment Plan for reducing the emissions associated with new development.

Per CEQA Guideline Section 15206(b), the project would not be considered regionally significant because it would not have the potential to substantially affect housing, employment, or population projections within the San Diego region, which are the basis of the RAQS and Attainment Plan projections. Additionally, the project would result in a reduction to regional VMT. As such, the project would not conflict with or obstruct implementation of the RAQS or Attainment Plan. Furthermore, the project would not result in substantial construction or operational emissions that would conflict with the local air quality plans. Therefore, implementation of the project would not conflict with the RAQS or Attainment Plan and proposed development would be consistent with the growth in the region. Impacts would be less than significant.

### 4.1.3 Mitigation Measures and Design Considerations

Impacts would be less than significant, and no mitigation would be required.

### 4.1.4 Conclusions

The project would not conflict with or obstruct the implementation of the San Diego RAQS or Attainment Plan, and the impact would be less than significant.

## 4.2 CONFORMANCE TO FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

### 4.2.1 Construction Impacts

Project construction activities would have the potential to adversely affect air quality through the generation of criteria pollutants (which include fugitive dust emissions) and criteria pollutant precursors.

#### 4.2.1.1 Guideline for the Determination of Significance

*Would the project construction result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

To determine whether a project would result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation, project emissions may be evaluated based on the quantitative emission thresholds adopted by the County (as shown in Table 5).

#### 4.2.1.2 Significance of Impacts Prior to Mitigation

**General Construction Activities**

Table 8, *Maximum Daily Construction Emissions,* provides a summary of the unmitigated maximum daily construction emission estimates by activity and season. Modeling assumed that dust control measures (watering a minimum of two times daily) would be employed to reduce emissions of fugitive dust during construction.

**Table 8**
**MAXIMUM DAILY CONSTRUCTION EMISSIONS**

| Activity | Season / Year | Pollutant Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|---|
| | | VOC | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Site Preparation | Winter / 2026 | 3.2 | 29.2 | 29.5 | <0.1 | 9.1 | 5.1 |
| Grading | Winter / 2026 | 3.1 | 27.4 | 28.4 | <0.1 | 4.9 | 2.5 |
| Grading | Summer/2026 | 3.1 | 27.4 | 28.5 | <0.1 | 4.9 | 2.5 |
| Building Construction | Summer/2026 | 1.1 | 9.9 | 13.1 | <0.1 | 0.4 | 0.4 |
| Building Construction | Winter/2027 | 1.1 | 9.9 | 13.0 | <0.1 | 0.4 | 0.4 |
| Paving | Summer/2027 | 1.0 | 7.0 | 10.6 | <0.1 | 0.4 | 0.3 |
| Architectural Coating | Summer/2027 | 3.1 | 0.8 | 1.1 | <0.1 | <0.1 | <0.1 |
| **Maximum Daily Emissions** | | **47.6** | **5.4** | **6.7** | **<0.1** | **0.6** | **0.4** |
| *Screening Thresholds* | | *75* | *250* | *550* | *250* | *100* | *55* |
| ***Exceed Thresholds?*** | | ***No*** | ***No*** | ***No*** | ***No*** | ***No*** | ***No*** |

Source: CalEEMod (output data is provided in Appendix A of this report).
lbs./day = pounds per day; VOC = volatile organic compound; $NO_X$ = nitrogen oxides; CO = carbon monoxide; $SO_X$ = sulfur oxides; $PM_{10}$ = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter.

As shown in Table 8, emissions of all criteria pollutants would be below the daily thresholds during construction. The project's construction activities would not result in a violation of the NAAQS or CAAQS, and the impact would be less than significant.

#### 4.2.1.3 Mitigation Measures and Design Considerations

As discussed in Section 1.3, the project would incorporate construction BMPs to reduce project-related emissions to satisfy the requirements of the SDAPCD Rule 55. Not all BMPs were included in the project's construction emissions calculations; thus, the implementation of the BMPs would further reduce fugitive dust ($PM_{10}$ and $PM_{2.5}$) emissions resulting from project construction activity.

#### 4.2.1.4 Conclusions

The project's construction activities would not result in a violation of the NAAQS or CAAQS, and the impact would be less than significant.

### 4.2.2 Operational Impacts

Project operational activities would have the potential to adversely affect air quality through the generation of criteria pollutants (which include fugitive dust emissions) and criteria pollutant precursors.

#### 4.2.2.1 Guideline for the Determination of Significance

Based on the County Guidelines (2007), operational impacts would be potentially significant if they exceed the quantitative screening-level thresholds for criteria pollutants and criteria pollutant precursors adopted by the County (as shown in Table 5).

#### 4.2.2.2 Significance of Impacts Prior to Mitigation

Table 9, *Maximum Daily Operational Emissions*, compares the project operational emissions to the screening thresholds.

**Table 9**
**MAXIMUM DAILY OPERATIONAL EMISSIONS - 2028**

| Source | Pollutant Emissions (pounds per day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Mobile | 2.0 | 1.6 | 16.5 | <0.1 | 3.9 | 1.0 |
| Area | 0.3 | <0.1 | 0.2 | <0.1 | <0.1 | <0.1 |
| Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total Maximum Daily Emissions** | **2.3** | **1.6** | **16.7** | **<0.1** | **3.9** | **1.0** |
| *Screening Thresholds* | *137* | *250* | *550* | *250* | *100* | *67* |
| *Exceed Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |

Source: CalEEMod (output data is provided in Appendix A of this report).
Note: Totals may not sum due to rounding.
VOC = volatile organic compounds; $NO_X$ = nitrogen oxides; CO = carbon monoxide; $SO_X$ = sulfur oxides; $PM_{10}$ = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

As shown in Table 9, emissions of criteria pollutants and ozone precursors during project operation would not exceed the daily screening thresholds. Therefore, the project's operational emissions would not result in a violation of the NAAQS or CAAQS, and the impact would be less than significant.

#### 4.2.2.3 Mitigation Measures and Design Considerations

Impacts would be less than significant, and no mitigation would be required.

#### 4.2.2.4 Conclusions

The project's operational emissions would not exceed the County screening threshold levels. Therefore, operation of the project would not result in a violation of the NAAQS or CAAQS, and the impact would be less than significant.

## 4.3 CUMULATIVELY CONSIDERABLE NET INCREASE OF CRITERIA POLLUTANTS

### 4.3.1 Construction Impacts

Based on the County Guidelines (2007), a project would result in a cumulatively significant impact if the project results in a significant contribution to the cumulative increase in pollutants for which the SDAB is listed as nonattainment for the CAAQS and NAAQS. As discussed in Section 2.0, the SDAB is designated as a nonattainment area for the NAAQS for ozone and the CAAQS for ozone, $PM_{10}$, and $PM_{2.5}$.

Cumulatively considerable net increases during the construction phase would typically happen if two or more projects near each other are simultaneously under construction. A project that has a significant direct impact on air quality with regard to emissions of $PM_{10}$, $PM_{2.5}$, $NO_X$, or VOCs during construction would also have a significant cumulatively considerable net increase. In the event direct impacts from a proposed project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of concern from other proposed or reasonably foreseeable future projects within a proximity relevant to the pollutants of concern, are in excess of the screening shown in Table 5.

#### 4.3.1.1 Guidelines for the Determination of Significance

The following thresholds are used for the assessment of cumulative construction impacts:

*Would the project result in emissions that exceed 250 lbs. per day of $NO_X$ or 75 lbs. per day of VOCs?*

*Would the project result in emissions of $PM_{2.5}$ that exceed 55 lbs. per day?*

*Would the project result in emissions of $PM_{10}$ that exceed 100 lbs. per day and increase the ambient $PM_{10}$ concentration by 5.0 micrograms per cubic meter ($\mu g/m^3$) or greater at the maximum exposed individual?*

#### 4.3.1.2 Significance of Impacts Prior to Mitigation

As shown in Section 4.2.1, project construction emissions would not exceed the screening level thresholds. Short-term cumulative impacts related to air quality could occur if the construction of the project and other projects in the surrounding area were to occur simultaneously. In particular, with respect to local impacts, the consideration of cumulative construction particulate matter ($PM_{10}$ and $PM_{2.5}$) impacts is limited to cases when projects constructed simultaneously are within a few hundred yards of each other because of (1) the combination of the short-range (distance) of particulate dispersion (especially when compared to gaseous pollutants) and (2) the SDAPCD's required dust control measures which further limit particulate dispersion from a project site.

With respect to local concentrations of $PM_{10}$ and $PM_{2.5}$, there are no known current or future projects in the vicinity of the project where major construction involving demolition activities, cut-and-fill operations, or soil import/export, would occur concurrently with the project construction activities. In addition, all construction activities in the SDAB are required to implement fugitive dust control measures to comply with the SDAPCD's regulations which limit particulate matter dispersion from any project site. Therefore, because the project's construction emissions (including $NO_X$, VOCs, $PM_{10}$, and $PM_{2.5}$) would be below SLTs which were designed to be protective of human health and welfare (as shown in Table 8), the project would not result in a cumulatively considerable net increase for any criteria pollutant for which the project region is in non-attainment, would not adversely affect public health, and the impact would be less than significant.

#### 4.3.1.3 Mitigation Measures and Design Considerations

Control measures for construction are discussed in Section 1.3. As discussed in that section, the implementation of construction BMPs controlling fugitive dust emissions would minimize the project's contribution to cumulative air quality impacts from construction activities. Cumulative projects would also need to comply with SDAPCD Rules for dust control and construction equipment. No mitigation measures would be required.

#### 4.3.1.4 Conclusions

Cumulative impacts associated with project construction emissions of criteria pollutants and ozone precursors would be less than cumulatively considerable.

### 4.3.2 Operational Impacts

As discussed above, based on the County Guidelines (2007), a project would result in a cumulatively significant impact if the project results in a significant contribution to the cumulative increase in criteria pollutants and ozone precursors. In accordance with the guidelines, a project that does not conform to the RAQS and/or has a significant direct impact on air quality with regard to operational emissions of nonattainment pollutants would also have a cumulatively considerable net increase. Also, projects that cause road intersections to operate at or below a level of service (LOS) E and create a CO hotspot create a cumulatively considerable net increase of CO.

#### 4.3.2.1 Guidelines for the Determination of Significance

The following thresholds are used for the assessment of cumulatively considerable net increases in air pollutants during the operational phase:

*Would the project conform to the RAQS and/or have a significant direct impact on air quality with regard to operational emissions of $PM_{10}$, $PM_{2.5}$, $NO_X$, and/or VOCs, which would also have a significant cumulatively considerable net increase in these emissions?*

*Would the project cause road intersections or roadway segments to operate at or below LOS E and create a CO hotspot that would result in a cumulatively considerable net increase of CO?*

#### 4.3.2.2 Significance of Impacts Prior to Mitigation

As described in Sections 4.1 and 4.2, the project would be consistent with the RAQS, and would not exceed the County’s screening-level thresholds. As discussed in Section 4.4.2, the project would not create a CO hotspot that would result in a cumulatively considerable net increase of CO. Therefore, operation of the project would not create a cumulatively considerable net increase in criteria pollutants associated with operation, would not adversely affect public health, and the impacts would be less than significant.

#### 4.3.2.3 Mitigation Measures and Design Considerations

Impacts would be less than significant, and no mitigation would be required.

#### 4.3.2.4 Conclusions

Cumulative impacts associated with project operational emissions of criteria pollutants and ozone precursors would be less than cumulatively considerable.

## 4.4 IMPACTS TO SENSITIVE RECEPTORS

### 4.4.1 Guidelines for the Determination of Significance

*Would the project expose sensitive receptors to substantial pollutant concentrations?*

The following guidelines of significance are used by the County to address the above question:

*Would the project place sensitive receptors near CO hotspots or create CO hotspots near sensitive receptors?*

*Would project implementation result in exposure to TACs resulting in a maximum incremental cancer risk greater than 1 in 10 million or a health hazard index greater than 1 and, thus, be deemed as having a potentially significant impact?*

### 4.4.2 Significance of Impacts Prior to Mitigation

#### 4.4.2.1 CO Concentrations (CO Hotspot Analysis)

CO hotspots are most likely to occur at heavily congested intersections where idling vehicles increase localized CO concentrations. The County guidelines call for a CO hotspot analysis if the project would:

- Place sensitive receptors within 500 feet of a signalized intersection with a LOS of E or F, with peak-hour trips exceeding 3,000 vehicles; or
- Cause intersections to operate at LOS E or F, with peak-hour trips exceeding 3,000 vehicles.

As discussed in Section 3.2.2, the project would generate approximately 55 peak-hour trips during operation. No LOS analysis was available for intersections in the project vicinity. Future traffic levels on roads in the project vicinity were estimated using data from the SANDAG's Traffic Forecast Information Center, ABM2+ 2021 RP forecasts generated to support the SANDAG's 2021 Regional Plan and Sustainable Communities Strategy (SANDAG 2023). Data most representative of traffic, when the project would become operational, is the year 2025 forecast. The highest volume intersection in the project vicinity would be the intersection of Deer Springs Road and the I-15 southbound ramps. The predicted maximum volume for this project-affected intersection would be 2,750 peak-hour trips, less than 3,000 vehicle peak-hour significance criteria for CO hotspots. Therefore, the project would not result in the formation of CO hotspots. Impacts to sensitive receptors resulting from CO hotspots would be less than significant.

#### 4.4.2.2 TAC Emissions

Construction of the project would result in the use of heavy-duty construction equipment, delivery trucks, and construction worker vehicles. These vehicles and equipment could generate DPM, which is classified as a TAC. Generation of DPM from construction projects typically occurs in a localized area (e.g., near locations with multiple pieces of heavy construction equipment working in close proximity) for a short period of time. Because construction activities and subsequent emissions vary depending on the phase of construction, the construction-related emissions to which nearby receptors are exposed to would also vary throughout the construction period. Concentrations of DPM emissions are typically reduced by 70 percent at approximately 500 feet (CARB 2005).

The dose of TACs to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has with the substance; a longer exposure period to a source of emissions would result in higher health risks. Current models and methodologies for conducting cancer health risk assessments are associated with longer-term exposure periods (typically 30 years for individual residents based on guidance from OEHHA) and are best suited for evaluation of long duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities.

Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime (OEHHA 2015). Considering this information, and the fact that any concentrated use of heavy construction equipment would occur at various locations throughout the project site only for short durations, construction of the project would not expose sensitive receptors to substantial DPM concentrations, and the impact would be less than significant.

Long-term operation of the project would result in some emissions of DPM from vehicles traveling to and from the project site. However, the project would not require the regular use of heavy or medium diesel-powered trucks (other than for occasional deliveries and waste collection) and the mix of vehicles traveling to and from the project site would primarily be light-duty autos and trucks typical of the region. Therefore, the project would not result in significant localized concentrations of DPM. As an outdoor recreational development, the proposed project in not anticipated to generate other long-term operational TACs. Therefore, the long-term operation of the project would not result in the exposure of sensitive receptors to substantial pollutant concentrations and the impact would be less than significant.

### 4.4.3 Mitigation Measures and Design Considerations

Impacts are less than significant; therefore, no mitigation measures are required.

### 4.4.4 Conclusions

Implementation of the project would not result in the formation of CO hotspots due to project-related traffic. Due to the short-term and intermittent nature of construction activity, impacts from construction-period DPM emissions would be less than significant. The project would not expose sensitive receptors to substantial concentrations of pollutants, and impacts would be less than significant.

## 4.5 ODOR IMPACTS

### 4.5.1 Guidelines for the Determination of Significance

Based on the County Guidelines (2007), a project would have a significant impact if it would generate objectionable odors or place sensitive receptors next to existing objectionable odors that would affect a considerable number of persons or the public.

SDAPCD Rule 51 (Public Nuisance) and California Health & Safety Code, Division 26, Part 4, Chapter 3, Section 541700, prohibit the emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public. In addition, the County's Zoning Ordinance, Section 6318, states: "all commercial and industrial uses shall be so operated as to not emit matter causing unpleasant odors which are perceptible by the average person at or beyond any lot line of the lot containing said uses." Projects required to obtain permits from SDAPCD, typically industrial and some commercial projects, are evaluated by SDAPCD staff for potential odor nuisance, and conditions may be applied (or control equipment required), where necessary, to prevent occurrence of public nuisance.

### 4.5.2 Significance of Impacts Prior to Mitigation

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations (SCAQMD 1993). The project, involving outdoor recreational development, would not include any of these uses. Project construction could result in minor amounts of odors associated with unburned hydrocarbons in diesel heavy equipment exhaust. The odor of these diesel exhausts is objectionable to some; however, emissions would be intermittent and would disperse rapidly, and, therefore, would not affect a substantial number of people. Therefore, impacts associated with odors during the construction and operation of the project would be less than significant.

### 4.5.3 Mitigation Measures and Design Considerations

Because the project would not generate objectionable odors or place sensitive receptors near existing odor sources that would affect a considerable number of persons or the public, no mitigation measures or additional design considerations are required.

### 4.5.4 Conclusions

Due to the nature of the project land uses, there are no significant odorous air emissions anticipated from construction or operation; therefore, impacts would be less than significant.

# 5.0 SUMMARY OF RECOMMENDED PROJECT DESIGN FEATURES, IMPACTS, AND MITIGATION

## 5.1 PROJECT DESIGN FEATURES

As described in Section 1.3, the project would incorporate measures to minimize fugitive dust emissions, including watering twice per day during grading and stabilization of storage piles. The project would comply with Rule 55, which requires that no visible dust be emitted beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period. The project would incorporate measures to minimize the track-out/carry-out of visible roadway dust per Rule 55 and fugitive dust BMPs, including watering exposed surfaces a minimum of twice per day.

## 5.2 PROJECT IMPACTS

As described in Section 4.1, the project would be consistent with the RAQS and Attainment Plan.

The control measures listed above constitute BMPs for dust control. With the implementation of construction BMPs, air pollutant emissions impacts associated with project construction and operation would be less than significant.

The project would not result in cumulatively considerable emissions of nonattainment air pollutants that would exceed the screening level thresholds.

Impacts associated with exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Impacts from odors generated from the construction and operation of the project would be less than significant.

## 5.3 PROJECT MITIGATION

Because the project would not result in significant impacts, no mitigation is required.

# 6.0 LIST OF PREPARERS

| | |
|---|---|
| Joanne M. Dramko, AICP | Principal Air Quality Specialist, County-approved Air Quality Consultant |
| Victor Ortiz | Senior Air Quality Specialist, County-approved Air Quality Consultant |
| Julie McCall | Project Manager |

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7578 El Cajon Boulevard
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# Appendix A

CalEEMod Output

# Karve Ski Park Detailed Report

## Table of Contents

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Karve Ski Park |
| Construction Start Date | 1/1/2026 |
| Operational Year | 2028 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.20 |
| Precipitation (days) | 20.8 |
| Location | 26351 N Centre City Pkwy, Escondido, CA 92026, USA |
| County | San Diego |
| City | Unincorporated |
| Air District | San Diego County APCD |
| Air Basin | San Diego |
| TAZ | 6280 |
| EDFZ | 12 |
| Electric Utility | San Diego Gas & Electric |
| Gas Utility | San Diego Gas & Electric |
| App Version | 2022.1.1.20 |

## 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 |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| City Park | 9.13 | Acre | 9.13 | 0.00 | 67,688 | 67,688 | — | — |
| Fast Food Restaurant w/o Drive Thru | 4.13 | 1000sqft | 0.00 | 4,125 | 0.00 | — | — | — |
| Parking Lot | 147 | Space | 1.32 | 0.00 | 0.00 | — | — | — |

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

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

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 3.71 | 3.12 | 27.3 | 28.5 | 0.06 | 1.12 | 3.77 | 4.89 | 1.03 | 1.47 | 2.50 | — | 6,837 | 6,837 | 0.28 | 0.07 | 0.76 | 6,866 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 3.81 | 3.21 | 29.2 | 29.5 | 0.06 | 1.24 | 7.81 | 9.06 | 1.14 | 3.97 | 5.12 | — | 6,827 | 6,827 | 0.28 | 0.07 | 0.02 | 6,855 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.42 | 1.19 | 10.7 | 12.5 | 0.02 | 0.43 | 0.89 | 1.32 | 0.39 | 0.37 | 0.77 | — | 2,601 | 2,601 | 0.11 | 0.03 | 0.09 | 2,612 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.26 | 0.22 | 1.95 | 2.28 | < 0.005 | 0.08 | 0.16 | 0.24 | 0.07 | 0.07 | 0.14 | — | 431 | 431 | 0.02 | < 0.005 | 0.01 | 432 |

## 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 | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 3.71 | 3.12 | 27.3 | 28.5 | 0.06 | 1.12 | 3.77 | 4.89 | 1.03 | 1.47 | 2.50 | — | 6,837 | 6,837 | 0.28 | 0.07 | 0.76 | 6,866 |
| 2027 | 1.24 | 3.12 | 9.42 | 13.0 | 0.02 | 0.34 | 0.13 | 0.42 | 0.31 | 0.03 | 0.31 | — | 2,429 | 2,429 | 0.10 | 0.02 | 0.44 | 2,438 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 3.81 | 3.21 | 29.2 | 29.5 | 0.06 | 1.24 | 7.81 | 9.06 | 1.14 | 3.97 | 5.12 | — | 6,827 | 6,827 | 0.28 | 0.07 | 0.02 | 6,855 |
| 2027 | 1.24 | 1.04 | 9.42 | 13.0 | 0.02 | 0.34 | 0.02 | 0.36 | 0.31 | < 0.005 | 0.31 | — | 2,428 | 2,428 | 0.10 | 0.02 | < 0.005 | 2,437 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 1.42 | 1.19 | 10.7 | 12.5 | 0.02 | 0.43 | 0.89 | 1.32 | 0.39 | 0.37 | 0.77 | — | 2,601 | 2,601 | 0.11 | 0.03 | 0.09 | 2,612 |
| 2027 | 0.46 | 0.56 | 3.49 | 4.86 | 0.01 | 0.13 | 0.01 | 0.14 | 0.12 | < 0.005 | 0.12 | — | 886 | 886 | 0.04 | 0.01 | 0.02 | 890 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 0.26 | 0.22 | 1.95 | 2.28 | < 0.005 | 0.08 | 0.16 | 0.24 | 0.07 | 0.07 | 0.14 | — | 431 | 431 | 0.02 | < 0.005 | 0.01 | 432 |
| 2027 | 0.08 | 0.10 | 0.64 | 0.89 | < 0.005 | 0.02 | < 0.005 | 0.03 | 0.02 | < 0.005 | 0.02 | — | 147 | 147 | 0.01 | < 0.005 | < 0.005 | 147 |

## 2.4. Operations Emissions Compared Against Thresholds

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

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Unmit. | 2.28 | 2.34 | 1.50 | 16.7 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | 28.4 | 4,387 | 4,415 | 3.06 | 0.17 | 18.4 | 4,560 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Unmit. | 2.21 | 2.27 | 1.64 | 15.4 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | 28.4 | 4,192 | 4,221 | 3.07 | 0.18 | 6.76 | 4,357 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 2.20 | 2.26 | 1.62 | 15.5 | 0.04 | 0.03 | 3.82 | 3.85 | 0.03 | 0.97 | 1.00 | 28.4 | 4,222 | 4,250 | 3.07 | 0.17 | 11.6 | 4,391 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.40 | 0.41 | 0.30 | 2.83 | 0.01 | 0.01 | 0.70 | 0.70 | 0.01 | 0.18 | 0.18 | 4.71 | 699 | 704 | 0.51 | 0.03 | 1.92 | 727 |

## 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 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 2.25 | 2.04 | 1.50 | 16.5 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | — | 4,342 | 4,342 | 0.18 | 0.16 | 12.0 | 4,405 |
| Area | 0.03 | 0.29 | < 0.005 | 0.18 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.74 | 0.74 | < 0.005 | < 0.005 | — | 0.74 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 41.2 | 41.2 | 0.03 | < 0.005 | — | 43.0 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 2.40 | 2.53 | 4.93 | 0.25 | 0.01 | — | 12.9 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 26.0 | 0.00 | 26.0 | 2.60 | 0.00 | — | 91.1 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 6.45 | 6.45 |
| Total | 2.28 | 2.34 | 1.50 | 16.7 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | 28.4 | 4,387 | 4,415 | 3.06 | 0.17 | 18.4 | 4,560 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 2.21 | 2.01 | 1.64 | 15.4 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | — | 4,149 | 4,149 | 0.19 | 0.17 | 0.31 | 4,203 |
| Area | — | 0.26 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 41.2 | 41.2 | 0.03 | < 0.005 | — | 43.0 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 2.40 | 2.53 | 4.93 | 0.25 | 0.01 | — | 12.9 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 26.0 | 0.00 | 26.0 | 2.60 | 0.00 | — | 91.1 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 6.45 | 6.45 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 2.21 | 2.27 | 1.64 | 15.4 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | 28.4 | 4,192 | 4,221 | 3.07 | 0.18 | 6.76 | 4,357 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 2.19 | 1.98 | 1.62 | 15.4 | 0.04 | 0.03 | 3.82 | 3.85 | 0.03 | 0.97 | 1.00 | — | 4,178 | 4,178 | 0.19 | 0.16 | 5.17 | 4,237 |
| Area | 0.02 | 0.28 | < 0.005 | 0.09 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.36 | 0.36 | < 0.005 | < 0.005 | — | 0.37 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 41.2 | 41.2 | 0.03 | < 0.005 | — | 43.0 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 2.40 | 2.53 | 4.93 | 0.25 | 0.01 | — | 12.9 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 26.0 | 0.00 | 26.0 | 2.60 | 0.00 | — | 91.1 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 6.45 | 6.45 |
| Total | 2.20 | 2.26 | 1.62 | 15.5 | 0.04 | 0.03 | 3.82 | 3.85 | 0.03 | 0.97 | 1.00 | 28.4 | 4,222 | 4,250 | 3.07 | 0.17 | 11.6 | 4,391 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.40 | 0.36 | 0.30 | 2.81 | 0.01 | 0.01 | 0.70 | 0.70 | 0.01 | 0.18 | 0.18 | — | 692 | 692 | 0.03 | 0.03 | 0.86 | 701 |
| Area | < 0.005 | 0.05 | < 0.005 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.06 | 0.06 | < 0.005 | < 0.005 | — | 0.06 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 6.82 | 6.82 | < 0.005 | < 0.005 | — | 7.12 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.40 | 0.42 | 0.82 | 0.04 | < 0.005 | — | 2.14 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 4.31 | 0.00 | 4.31 | 0.43 | 0.00 | — | 15.1 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.07 | 1.07 |
| Total | 0.40 | 0.41 | 0.30 | 2.83 | 0.01 | 0.01 | 0.70 | 0.70 | 0.01 | 0.18 | 0.18 | 4.71 | 699 | 704 | 0.51 | 0.03 | 1.92 | 727 |

# 3. Construction Emissions Details

## 3.1. Site Preparation (2026) - Unmitigated

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

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

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.74 | 3.14 | 29.2 | 28.8 | 0.05 | 1.24 | — | 1.24 | 1.14 | — | 1.14 | — | 5,298 | 5,298 | 0.21 | 0.04 | — | 5,316 |
| Dust From Material Movement | — | — | — | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10 | 0.09 | 0.80 | 0.79 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 145 | 145 | 0.01 | < 0.005 | — | 146 |
| Dust From Material Movement | — | — | — | — | — | — | 0.21 | 0.21 | — | 0.11 | 0.11 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.15 | 0.14 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 24.0 | 24.0 | < 0.005 | < 0.005 | — | 24.1 |
| Dust From Material Movement | — | — | — | — | — | — | 0.04 | 0.04 | — | 0.02 | 0.02 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.05 | 0.67 | 0.00 | 0.00 | 0.15 | 0.15 | 0.00 | 0.03 | 0.03 | — | 154 | 154 | 0.01 | 0.01 | 0.01 | 156 |
| 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 | 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 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 4.25 | 4.25 | < 0.005 | < 0.005 | 0.01 | 4.31 |
| 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 | 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.70 | 0.70 | < 0.005 | < 0.005 | < 0.005 | 0.71 |
| 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 | 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 | 0.00 | 0.00 |

## 3.3. Grading (2026) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.62 | 3.04 | 27.2 | 27.6 | 0.06 | 1.12 | — | 1.12 | 1.03 | — | 1.03 | — | 6,599 | 6,599 | 0.27 | 0.05 | — | 6,621 |
| Dust From Material Movement | — | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.62 | 3.04 | 27.2 | 27.6 | 0.06 | 1.12 | — | 1.12 | 1.03 | — | 1.03 | — | 6,599 | 6,599 | 0.27 | 0.05 | — | 6,621 |
| Dust From Material Movement | — | — | — | — | — | — | 3.59 | 3.59 | — | 1.42 | 1.42 | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.65 | 0.54 | 4.85 | 4.91 | 0.01 | 0.20 | — | 0.20 | 0.18 | — | 0.18 | — | 1,175 | 1,175 | 0.05 | 0.01 | — | 1,179 |
| Dust From Material Movement | — | — | — | — | — | — | 0.64 | 0.64 | — | 0.25 | 0.25 | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.10 | 0.88 | 0.90 | < 0.005 | 0.04 | — | 0.04 | 0.03 | — | 0.03 | — | 195 | 195 | 0.01 | < 0.005 | — | 195 |
| Dust From Material Movement | — | — | — | — | — | — | 0.12 | 0.12 | — | 0.05 | 0.05 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08 | 0.07 | 0.06 | 0.86 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | — | 186 | 186 | 0.01 | 0.01 | 0.65 | 189 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.07 | 0.03 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 53.0 | 53.0 | < 0.005 | 0.01 | 0.11 | 55.7 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08 | 0.07 | 0.06 | 0.76 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | — | 176 | 176 | 0.01 | 0.01 | 0.02 | 178 |
| 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 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.07 | 0.03 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 53.0 | 53.0 | < 0.005 | 0.01 | < 0.005 | 55.7 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.14 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 31.5 | 31.5 | < 0.005 | < 0.005 | 0.05 | 32.0 |
| 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 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 9.44 | 9.44 | < 0.005 | < 0.005 | 0.01 | 9.92 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 5.22 | 5.22 | < 0.005 | < 0.005 | 0.01 | 5.30 |
| 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 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 1.56 | 1.56 | < 0.005 | < 0.005 | < 0.005 | 1.64 |

## 3.5. Building Construction (2026) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.28 | 1.07 | 9.85 | 13.0 | 0.02 | 0.38 | — | 0.38 | 0.35 | — | 0.35 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 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 | 1.28 | 1.07 | 9.85 | 13.0 | 0.02 | 0.38 | — | 0.38 | 0.35 | — | 0.35 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 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 | 0.65 | 0.54 | 5.01 | 6.60 | 0.01 | 0.19 | — | 0.19 | 0.18 | — | 0.18 | — | 1,220 | 1,220 | 0.05 | 0.01 | — | 1,224 |
| 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.10 | 0.92 | 1.20 | < 0.005 | 0.04 | — | 0.04 | 0.03 | — | 0.03 | — | 202 | 202 | 0.01 | < 0.005 | — | 203 |
| 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 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | < 0.005 | 0.07 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 16.1 | 16.1 | < 0.005 | < 0.005 | 0.06 | 16.3 |
| Vendor | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 16.6 | 16.6 | < 0.005 | < 0.005 | 0.04 | 17.4 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.07 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 15.2 | 15.2 | < 0.005 | < 0.005 | < 0.005 | 15.4 |
| Vendor | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 16.6 | 16.6 | < 0.005 | < 0.005 | < 0.005 | 17.3 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 7.81 | 7.81 | < 0.005 | < 0.005 | 0.01 | 7.92 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.45 | 8.45 | < 0.005 | < 0.005 | 0.01 | 8.83 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 1.29 | 1.29 | < 0.005 | < 0.005 | < 0.005 | 1.31 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 1.40 | 1.40 | < 0.005 | < 0.005 | < 0.005 | 1.46 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.7. 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 | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.23 | 1.03 | 9.39 | 12.9 | 0.02 | 0.34 | — | 0.34 | 0.31 | — | 0.31 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.23 | 1.03 | 9.39 | 12.9 | 0.02 | 0.34 | — | 0.34 | 0.31 | — | 0.31 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| 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 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.40 | 0.33 | 3.05 | 4.20 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 779 | 779 | 0.03 | 0.01 | — | 781 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.06 | 0.56 | 0.77 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 129 | 129 | 0.01 | < 0.005 | — | 129 |
| 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 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | < 0.005 | 0.07 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 15.8 | 15.8 | < 0.005 | < 0.005 | 0.05 | 16.1 |
| Vendor | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 16.3 | 16.3 | < 0.005 | < 0.005 | 0.04 | 17.0 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 15.0 | 15.0 | < 0.005 | < 0.005 | < 0.005 | 15.2 |
| Vendor | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 16.3 | 16.3 | < 0.005 | < 0.005 | < 0.005 | 17.0 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 4.90 | 4.90 | < 0.005 | < 0.005 | 0.01 | 4.97 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 5.28 | 5.28 | < 0.005 | < 0.005 | 0.01 | 5.51 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.81 | 0.81 | < 0.005 | < 0.005 | < 0.005 | 0.82 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.87 | 0.87 | < 0.005 | < 0.005 | < 0.005 | 0.91 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.9. Paving (2027) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.88 | 0.74 | 6.94 | 9.95 | 0.01 | 0.30 | — | 0.30 | 0.27 | — | 0.27 | — | 1,511 | 1,511 | 0.06 | 0.01 | — | 1,516 |
| Paving | — | 0.17 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.04 | 0.38 | 0.55 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 82.8 | 82.8 | < 0.005 | < 0.005 | — | 83.1 |
| Paving | — | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.07 | 0.10 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 13.7 | 13.7 | < 0.005 | < 0.005 | — | 13.8 |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.06 | 0.05 | 0.04 | 0.61 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.03 | 0.03 | — | 137 | 137 | 0.01 | < 0.005 | 0.44 | 139 |
| 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 | 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 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 | 0.01 | 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 | 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 1.18 | 1.18 | < 0.005 | < 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 | 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 | 0.00 | 0.00 |

## 3.11. Architectural Coating (2027) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14 | 0.11 | 0.83 | 1.13 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 134 | 134 | 0.01 | < 0.005 | — | 134 |
| Architectural Coatings | — | 3.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.05 | 0.06 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 7.32 | 7.32 | < 0.005 | < 0.005 | — | 7.34 |
| Architectural Coatings | — | 0.16 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.21 | 1.21 | < 0.005 | < 0.005 | — | 1.22 |
| Architectural Coatings | — | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 3.17 | 3.17 | < 0.005 | < 0.005 | 0.01 | 3.21 |
| 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 | 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 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.17 | 0.17 | < 0.005 | < 0.005 | < 0.005 | 0.17 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | 0.03 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 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 | 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 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | 2.25 | 2.04 | 1.50 | 16.5 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | — | 4,342 | 4,342 | 0.18 | 0.16 | 12.0 | 4,405 |
| Fast Food Restaurant w/o Drive Thru | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 2.25 | 2.04 | 1.50 | 16.5 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | — | 4,342 | 4,342 | 0.18 | 0.16 | 12.0 | 4,405 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | 2.21 | 2.01 | 1.64 | 15.4 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | — | 4,149 | 4,149 | 0.19 | 0.17 | 0.31 | 4,203 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fast Food Restaurant w/o Drive Thru | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 2.21 | 2.01 | 1.64 | 15.4 | 0.04 | 0.03 | 3.87 | 3.90 | 0.03 | 0.98 | 1.01 | — | 4,149 | 4,149 | 0.19 | 0.17 | 0.31 | 4,203 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | 0.40 | 0.36 | 0.30 | 2.81 | 0.01 | 0.01 | 0.70 | 0.70 | 0.01 | 0.18 | 0.18 | — | 692 | 692 | 0.03 | 0.03 | 0.86 | 701 |
| Fast Food Restaurant w/o Drive Thru | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 0.40 | 0.36 | 0.30 | 2.81 | 0.01 | 0.01 | 0.70 | 0.70 | 0.01 | 0.18 | 0.18 | — | 692 | 692 | 0.03 | 0.03 | 0.86 | 701 |

## 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 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | — | 34.9 | 34.9 | 0.03 | < 0.005 | — | 36.5 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 6.24 | 6.24 | < 0.005 | < 0.005 | — | 6.52 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 41.2 | 41.2 | 0.03 | < 0.005 | — | 43.0 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | — | 34.9 | 34.9 | 0.03 | < 0.005 | — | 36.5 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 6.24 | 6.24 | < 0.005 | < 0.005 | — | 6.52 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 41.2 | 41.2 | 0.03 | < 0.005 | — | 43.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | — | 5.79 | 5.79 | < 0.005 | < 0.005 | — | 6.04 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 1.03 | 1.03 | < 0.005 | < 0.005 | — | 1.08 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 6.82 | 6.82 | < 0.005 | < 0.005 | — | 7.12 |

## 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | — | 0.00 |
| Fast Food Restaurant w/o Drive Thru | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | — | 0.00 |
| Fast Food Restaurant w/o Drive Thru | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | — | 0.00 |
| Fast Food Restaurant w/o Drive Thru | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

## 4.3. 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 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.25 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.03 | 0.03 | < 0.005 | 0.18 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.74 | 0.74 | < 0.005 | < 0.005 | — | 0.74 |
| Total | 0.03 | 0.29 | < 0.005 | 0.18 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.74 | 0.74 | < 0.005 | < 0.005 | — | 0.74 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.25 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | 0.26 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.05 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landsca Equipment | < 0.005 | < 0.005 | < 0.005 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.06 | 0.06 | < 0.005 | < 0.005 | — | 0.06 |
| Total | < 0.005 | 0.05 | < 0.005 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.06 | 0.06 | < 0.005 | < 0.005 | — | 0.06 |

## 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 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 1.47 | 1.47 | < 0.005 | < 0.005 | — | 1.54 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | 2.40 | 1.05 | 3.45 | 0.25 | 0.01 | — | 11.4 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2.40 | 2.53 | 4.93 | 0.25 | 0.01 | — | 12.9 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 1.47 | 1.47 | < 0.005 | < 0.005 | — | 1.54 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | 2.40 | 1.05 | 3.45 | 0.25 | 0.01 | — | 11.4 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | 2.40 | 2.53 | 4.93 | 0.25 | 0.01 | — | 12.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.24 | 0.24 | < 0.005 | < 0.005 | — | 0.25 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | 0.40 | 0.17 | 0.57 | 0.04 | < 0.005 | — | 1.89 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 0.40 | 0.42 | 0.82 | 0.04 | < 0.005 | — | 2.14 |

## 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 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.42 | 0.00 | 0.42 | 0.04 | 0.00 | — | 1.48 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | 25.6 | 0.00 | 25.6 | 2.56 | 0.00 | — | 89.6 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 26.0 | 0.00 | 26.0 | 2.60 | 0.00 | — | 91.1 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.42 | 0.00 | 0.42 | 0.04 | 0.00 | — | 1.48 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | 25.6 | 0.00 | 25.6 | 2.56 | 0.00 | — | 89.6 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 26.0 | 0.00 | 26.0 | 2.60 | 0.00 | — | 91.1 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | 0.07 | 0.00 | 0.07 | 0.01 | 0.00 | — | 0.25 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | 4.24 | 0.00 | 4.24 | 0.42 | 0.00 | — | 14.8 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 4.31 | 0.00 | 4.31 | 0.43 | 0.00 | — | 15.1 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

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

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 6.45 | 6.45 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 6.45 | 6.45 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 6.45 | 6.45 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 6.45 | 6.45 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| City Park | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 |
| Fast Food Restaurant w/o Drive Thru | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.07 | 1.07 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.07 | 1.07 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

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

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

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

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

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

| Equipment Type | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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

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

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

| | | | | | | |
|---|---|---|---|---|---|---|
| Site Preparation | Site Preparation | 1/1/2026 | 1/14/2026 | 5.00 | 10.0 | — |
| Grading | Grading | 1/15/2026 | 4/15/2026 | 5.00 | 65.0 | — |
| Building Construction | Building Construction | 4/16/2026 | 6/15/2027 | 5.00 | 304 | — |
| Paving | Paving | 6/16/2027 | 7/13/2027 | 5.00 | 20.0 | — |
| Architectural Coating | Architectural Coating | 7/14/2027 | 8/10/2027 | 5.00 | 20.0 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Excavators | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Grading | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Scrapers | Diesel | Average | 2.00 | 8.00 | 423 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00 | 8.00 | 84.0 | 0.37 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 7.00 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Average | 3.00 | 8.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00 | 7.00 | 84.0 | 0.37 |
| Building Construction | Welders | Diesel | Average | 1.00 | 8.00 | 46.0 | 0.45 |
| Paving | Pavers | Diesel | Average | 2.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 2.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 6.00 | 37.0 | 0.48 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| 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 | 20.0 | 12.0 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 7.63 | HHDT,MHDT |
| Grading | Hauling | 0.75 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 1.73 | 12.0 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 0.68 | 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 | 0.35 | 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 | 0.00 | 0.00 | 14,288 | 4,763 | 3,458 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (sq. ft.) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Site Preparation | — | — | 15.0 | 0.00 | — |
| Grading | — | 390 | 195 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 1.32 |

### 5.6.2. Construction Earthmoving Control Strategies

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

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| City Park | 0.00 | 0% |
| Fast Food Restaurant w/o Drive Thru | 0.00 | 0% |
| Parking Lot | 1.32 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2026 | 0.00 | 45.1 | 0.03 | < 0.005 |
| 2027 | 0.00 | 45.1 | 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 |
|---|---|---|---|---|---|---|---|---|
| City Park | 526 | 526 | 526 | 191,990 | 5,484 | 5,484 | 5,484 | 2,001,795 |
| Fast Food Restaurant w/o Drive Thru | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

### 5.10.2. 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) |
|---|---|---|---|---|
| 0 | 0.00 | 14,288 | 4,763 | 3,458 |

### 5.10.3. Landscape Equipment

| 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) |
|---|---|---|---|---|---|
| City Park | 0.00 | 45.1 | 0.0330 | 0.0040 | 0.00 |
| Fast Food Restaurant w/o Drive Thru | 282,833 | 45.1 | 0.0330 | 0.0040 | 0.00 |
| Parking Lot | 50,484 | 45.1 | 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) |
|---|---|---|
| City Park | 0.00 | 2,247,868 |
| Fast Food Restaurant w/o Drive Thru | 1,252,077 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| City Park | 0.78 | — |
| Fast Food Restaurant w/o Drive Thru | 47.5 | — |
| Parking Lot | 0.00 | — |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| 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 |
| Fast Food Restaurant w/o Drive Thru | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| Fast Food Restaurant w/o Drive Thru | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.80 | 4.00 | 4.00 | 18.0 |
| Fast Food Restaurant w/o Drive Thru | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

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

## 5.16. 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. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| 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) |
|---|---|---|---|

# 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 | 16.6 | annual days of extreme heat |
| Extreme Precipitation | 5.75 | annual days with precipitation above 20 mm |
| Sea Level Rise | 0.00 | meters of inundation depth |
| Wildfire | 29.8 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (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 | N/A | N/A | N/A | N/A |
| Wildfire | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | N/A | N/A | N/A | N/A |

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

## 6.3. Adjusted Climate Risk Scores

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

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

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

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

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 58.3 |
| AQ-PM | 10.1 |
| AQ-DPM | 13.5 |
| Drinking Water | 49.7 |
| Lead Risk Housing | 14.7 |
| Pesticides | 63.0 |
| Toxic Releases | 10.5 |
| Traffic | 46.4 |
| Effect Indicators | — |
| CleanUp Sites | 0.00 |
| Groundwater | 52.0 |
| Haz Waste Facilities/Generators | 37.7 |
| Impaired Water Bodies | 90.1 |
| Solid Waste | 52.9 |
| Sensitive Population | — |
| Asthma | 20.7 |
| Cardio-vascular | 36.0 |
| Low Birth Weights | 35.0 |
| Socioeconomic Factor Indicators | — |
| Education | 36.9 |
| Housing | 11.6 |
| Linguistic | 42.1 |
| Poverty | 21.3 |

| | |
|---|---|
| Unemployment | 39.2 |

## 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 | 72.60361863 |
| Employed | 25.29192865 |
| Median HI | 71.97484922 |
| Education | — |
| Bachelor's or higher | 59.70742974 |
| High school enrollment | 10.76607212 |
| Preschool enrollment | 76.37623508 |
| Transportation | — |
| Auto Access | 87.47593995 |
| Active commuting | 9.778005903 |
| Social | — |
| 2-parent households | 71.76953676 |
| Voting | 81.99666367 |
| Neighborhood | — |
| Alcohol availability | 88.41267804 |
| Park access | 29.93712306 |
| Retail density | 10.6249198 |
| Supermarket access | 15.55241884 |
| Tree canopy | 61.70922623 |
| Housing | — |
| Homeownership | 84.70422174 |

| | |
|---|---|
| Housing habitability | 86.97549083 |
| Low-inc homeowner severe housing cost burden | 75.54215321 |
| Low-inc renter severe housing cost burden | 77.31297318 |
| Uncrowded housing | 90.74810728 |
| Health Outcomes | — |
| Insured adults | 57.69280123 |
| Arthritis | 43.8 |
| Asthma ER Admissions | 82.5 |
| High Blood Pressure | 75.3 |
| Cancer (excluding skin) | 34.5 |
| Asthma | 61.7 |
| Coronary Heart Disease | 63.8 |
| Chronic Obstructive Pulmonary Disease | 53.7 |
| Diagnosed Diabetes | 67.4 |
| Life Expectancy at Birth | 55.4 |
| Cognitively Disabled | 39.7 |
| Physically  Disabled | 78.7 |
| Heart Attack ER Admissions | 74.3 |
| Mental Health Not Good | 58.7 |
| Chronic Kidney Disease | 73.0 |
| Obesity | 64.9 |
| Pedestrian Injuries | 39.4 |
| Physical Health Not Good | 66.1 |
| Stroke | 70.4 |
| Health Risk Behaviors | — |
| Binge Drinking | 18.0 |
| Current Smoker | 60.5 |

| | |
|---|---|
| No Leisure Time for Physical Activity | 64.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 59.0 |
| SLR Inundation Area | 0.0 |
| Children | 71.1 |
| Elderly | 42.0 |
| English Speaking | 62.5 |
| Foreign-born | 25.1 |
| Outdoor Workers | 51.7 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 90.5 |
| Traffic Density | 52.8 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 37.3 |
| Other Decision Support | — |
| 2016 Voting | 82.6 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 24.0 |
| Healthy Places Index Score for Project Location (b) | 62.0 |
| 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 | 10.45 acre Project site.<br>67,688 sqft of landscaped area per landscape plan.<br>5,400 sqft of supporting buildings (Bldg A, C, and D)<br>4,125 sqft pavilion to include food/bar with indoor and outdoor seating (Bldg B) modeled as restaurant.<br>147 space parking lot |
| Construction: Construction Phases | CalEEMod defaults adjusted based on input from CCI |
| Operations: Vehicle Data | CR Associates - Scoping Agreement for Transportation Studies |
| Operations: Energy Use | All electric development. kBTU of NG converted into equal kWh of electricity and added to default electricity for Restaurant Use |