

# **Air Quality & Greenhouse Gas Emissions Assessment Pepper Development Project**

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**Colton, California**

**Prepared For:**

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**LIST OF ATTACHMENTS**

Attachment A – CalEEMod Output File for Air Quality Emissions and Greenhouse Gas Emissions

**LIST OF ACRONYMS AND ABBREVIATIONS**

°F	Degrees Fahrenheit
µg/m <sup>3</sup>	Micrograms per cubic meter; ppm = parts per million
1992 CO Plan	1992 Federal Attainment Plan for Carbon Monoxide
2022 Update	CARB’s Final 2022 Climate Change Scoping Plan
AB	Assembly Bill
APN	Assessor’s Parcel Number
AQMP	Air Quality Management Plan
ATCM	airborne toxics control measure
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CHCCSP	Colton’s Hub City Centre Specific Plan
CH <sub>4</sub>	Methane
City	Colton
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
County	San Bernardino County

**LIST OF ACRONYMS AND ABBREVIATIONS**

DPM	Diesel particulate matter
EO	Executive Order
GHG	Greenhouse gas
GSP	Gross state product
HVAC	Heating, Ventilation, and Air Conditioning
IPCC	Intergovernmental Panel on Climate Change
LSTs	Localized significance threshold
N <sub>2</sub> O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Nitric oxides
O <sub>3</sub>	Ozone
PM	Particulate matter
PM <sub>10</sub>	Coarse particulate matter
PM <sub>2.5</sub>	Fine particulate matter
ppb	Parts per billion
ppm	Parts per million
Project	Pepper Development Project
ROGs	Reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	Square foot/feet
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur dioxide
SO <sub>x</sub>	Sulfur oxides
SRA	Source receptor area
SoCAB	South Coast Air Basin
TACs	Toxic air contaminants
USEPA	U.S. Environmental Protection Agency
VOC	Volatile organic compounds
ZEVs	Zero-emission vehicles

## **1.0 INTRODUCTION**

This report documents the results of an Air Quality and Greenhouse Gas (GHG) Emissions Assessment completed for the Pepper Development Project (Project), which would include construction and operation of a three-story 60,000 square foot medical office clinic, a five-story 71,000 square foot hotel, a three-story parking structure, additional unenclosed parking, and associated site improvements in the City of Colton (City) in San Bernardino County (County). This assessment was prepared using methodologies and assumptions recommended in the rules and regulations of the South Coast Air Quality Management District (SCAQMD) and City of Colton, where applicable. Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and GHG emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

### **1.1 Location and Setting**

The Proposed Project is located on an approximately 9-acre (389,336 square feet [sf]) vacant parcel in the City of Colton in San Bernardino County, California (Figure 1, Project Location). The Project is located on the west side of North Pepper Avenue and approximately 625 feet south of West San Bernardino Avenue. The Project Area is composed of one parcel (Assessor's Parcel Number [APN] 0254-071-10) designated as Office/Mixed Use per the City's Colton Hub City Centre Specific Plan (CHCCSP 2016). As depicted on the U.S. Geological Survey (USGS) 7.5-minute "San Bernardino South, California" topographic quadrangle, the Proposed Project is located within Section 24, Township 1 South, Range 5 West, San Bernardino Principal Meridian.

### **1.2 Project Description**

The Project Applicant proposes to construct a three-story 60,000 sf medical office clinic, a five-story 71,000 sf commercial hotel, a three-story parking structure, surface parking areas, and associated site improvements such as curb and gutter, utilities, and landscaping on approximately 3.83 acres of the site. The remaining 5.1 acres in the western portion of the Project parcel is proposed to be a dedicated conservation area for the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) consistent with the conservation strategy identified within the West Valley Habitat Conservation Plan (City of Colton 2014).

The proposed three-story medical clinic would be built-to-suit and complement the nearby Arrowhead Regional Medical Center located across North Pepper Avenue. The proposed five-story hotel would be branded as a Home2 Suites by Hilton and would provide 112 guest rooms and guest amenities such as a pool. The proposed structures would be supported by a conventional slab-on-grade foundation system with perimeter-spread footings and isolated interior footings. Other improvements include concrete and asphalt pavement, hardscape, and landscaping.

The proposed parking structure and surface parking areas would service both the medical clinic and the hotel. Approximately 321 parking stalls, including Americans with Disability Act (ADA)-compliant stalls,

would be provided. This exceeds the 300-parking stall requirement for a medical office of the proposed size.



Location: N:\2024\2024-179.01 Colton Medical\_Hotel Development\MAPS\Location\_Vicinity\CWHD LnV.aprx - Colton Medical Hotel Development Location 20240827 (lgalvez - 9/5/2024)

Map Date: 9/5/2024  
Sources: Esri World Imagery, County of San Bernardino (2023)

**Figure 1. Project Location**

## **2.0 AIR QUALITY**

### **2.1 Air Quality Setting**

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the South Coast Air Basin (SoCAB), which encompasses the Project Site, pursuant to the regulatory authority of the SCAQMD.

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that reduce the potential for high levels of regional and local air pollutants. The following section describes the pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project Area.

#### **2.1.1 South Coast Air Basin**

The California Air Resources Board (CARB) divides the State into air basins that share similar meteorological and topographical features. The Project Site lies in the SoCAB, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter (SCAQMD 1993).

##### **2.1.1.1 Temperature and Precipitation**

The air basin is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the 6,645-square-mile SoCAB, ranging from the low 60s to the high 80s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas (SCAQMD 1993).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains.

##### **2.1.1.2 Humidity**

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 1993).

### **2.1.1.3 Wind**

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is higher during the dry summer months than during the rainy winter.

Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 1993).

### **2.1.1.4 Inversion**

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in San Bernardino County (SCAQMD 1993).

## **2.1.2 Criteria Air Pollutants**

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O<sub>3</sub>), coarse particulate matter (PM<sub>10</sub>), and fine particulate matter (PM<sub>2.5</sub>) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>) are considered to be local pollutants because they tend to accumulate in the air locally. Particulate matter (PM) is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 2-1.

<b>Table 2-1. Criteria Air Pollutants - Summary of Common Sources and Effects</b>		
<b>Pollutant</b>	<b>Major Manmade Sources</b>	<b>Human Health &amp; Welfare Effects</b>
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 system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO <sub>2</sub>	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O <sub>3</sub>	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrogen oxides (NO <sub>x</sub> ) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, 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.
PM <sub>10</sub> & PM <sub>2.5</sub>	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	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).
SO <sub>2</sub>	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: California Air Pollution Control Officers Association (CAPCOA 2013)

### 2.1.2.1 Carbon Monoxide

CO in the urban environment is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973. CO levels in the SoCAB are in compliance with the state and federal one- and eight-hour standards.

### **2.1.2.2 Nitrogen Oxides**

Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitric oxides (NO<sub>x</sub>). Motor vehicle emissions are the main source of NO<sub>x</sub> in urban areas. NO<sub>x</sub> is very toxic to animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to NO<sub>x</sub> increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of NO<sub>x</sub>, such as NO and NO<sub>2</sub>, attribute to the formation of O<sub>3</sub> and PM<sub>2.5</sub>. Epidemiological studies have also shown associations between NO<sub>2</sub> concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

### **2.1.2.3 Ozone**

O<sub>3</sub> is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) or reactive organic gasses (ROGs) and NO<sub>x</sub> undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. NO<sub>x</sub> forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level O<sub>3</sub> to form. Ground-level O<sub>3</sub> is the primary constituent of smog. Because O<sub>3</sub> formation occurs over extended periods of time, both O<sub>3</sub> and its precursors are transported by wind and high O<sub>3</sub> concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when O<sub>3</sub> levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O<sub>3</sub> exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.

### **2.1.2.4 Particulate Matter**

PM includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM<sub>10</sub>) and small than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM<sub>10</sub> is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM<sub>10</sub> generally settles out of the atmosphere rapidly and is not readily transported over large distances. PM<sub>2.5</sub> is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO<sub>x</sub>, sulfur oxides (SO<sub>x</sub>) and VOCs. PM<sub>2.5</sub> can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high PM<sub>2.5</sub> and PM<sub>10</sub> levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease.

According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM<sub>10</sub> and PM<sub>2.5</sub>. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM<sub>10</sub> and PM<sub>2.5</sub>. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

### **2.1.3 Toxic Air Contaminants**

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is 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.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

CARB identified diesel particulate matter (DPM) as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine (USEPA 2002). Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

### **2.1.4 Ambient Air Quality**

Ambient air quality at the Project Site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> are the pollutant species most potently affecting the Project region. As described in detail below, the region is classified as nonattainment regarding air quality standards for these pollutants. The San Bernardino – 4<sup>th</sup> Street air quality monitoring station (24302 E. 4<sup>th</sup> St, San Bernardino), located approximately 5.01 miles northeast of the Project Site, monitors ambient concentrations of O<sub>3</sub>, PM<sub>10</sub>

and PM<sub>2.5</sub>. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered “generally” representative of ambient concentrations in the Project Area.

Table 2-2 summarizes the published data concerning O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> from the San Bernardino – 4<sup>th</sup> Street monitoring station.

<b>Table 2-2. Summary of Ambient Air Quality Data</b>			
<b>Pollutant Standards</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>O<sub>3</sub> – San Bernardino 4<sup>th</sup> Street Monitoring Station</b>			
Max 1-hour concentration (ppm)	0.142	0.128	0.143
Max 8-hour concentration (ppm) (state/federal)	0.113 / 0.112	0.105 / 0.105	0.118 / 0.118
Number of days above 1-hour standard (state)	66	60	58
Number of days above 8-hour standard (state/federal)	101 / 98	103 / 96	87 / 84
<b>PM<sub>10</sub> – San Bernardino 4<sup>th</sup> Street Monitoring Station</b>			
Max 24-hour concentration (µg/m <sup>3</sup> ) (state/federal)	71.2 / 182.4	* / 177.8	* / *
Number of days above 24-hour standard (state/federal)	25.8 / 1.0	* / 1.0	* / *
<b>PM<sub>2.5</sub> – San Bernardino 4<sup>th</sup> Street Monitoring Station</b>			
Max 24-hour concentration (µg/m <sup>3</sup> ) (state/federal)	57.9 / 57.9	40.1 / 40.1	52.9 / 52.9
Number of days above federal 24-hour standard	3.0	6.4	3.1

Source: CARB 2024a

µg/m<sup>3</sup> = micrograms per cubic meter; ppm = parts per million

\* = Insufficient data available

The USEPA and CARB designate air basins or portions of air basins and counties as being in “attainment” or “nonattainment” for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the San Bernardino County portion of the SoCAB, which encompasses the Project Site, is included in Table 2-3.

**Table 2-3. Attainment Status of Criteria Pollutants in the San Bernardino County Portion of the SoCAB**

Pollutant	State Designation	Federal Designation
O <sub>3</sub>	Nonattainment	Nonattainment
PM <sub>10</sub>	Nonattainment	Attainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO <sub>2</sub>	Attainment	Unclassified/Attainment
SO <sub>2</sub>	Unclassified/Attainment	Unclassified/Attainment

Source: CARB 2022

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub> and PM<sub>10</sub> (CARB 2022).

### **2.1.5 Sensitive Receptors**

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The SCAQMD defines sensitive receptors as any residence including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes, long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

The Project is proposing the construction and operation of a 3-story medical facility, a 5-story hotel that would include 112 units and amenities such as a pool, and associated parking (both enclosed in a parking structure and unenclosed surface parking). The nearest sensitive receptors would be the residences located on W San Bernardino Avenue to the north and the Arrowhead Regional Medical Center on the eastern side of N Pepper Avenue. The residences on W San Bernardino Avenue are located approximately 730 feet north of the Project's north boundary and the Arrowhead Regional Medical Center's drop-off area is located approximately 400 feet distant from the Proposed Project's eastern boundary.

## **2.2 Regulatory Framework**

### **2.2.1 Federal**

#### **2.2.1.1 Clean Air Act**

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect public health and welfare. They are designed to protect those “sensitive receptors” most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 2-3 lists the federal attainment status of the SoCAB for the criteria pollutants.

### **2.2.2 State**

#### **2.2.2.1 California Clean Air Act**

The California Clean Air Act (CCAA) allows the State to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California’s State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

#### **2.2.2.2 California State Implementation Plan**

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to

attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The *2022 Air Quality Management Plan* (2022 AQMP) is the SIP for the SoCAB. The 2022 AQMP is a regional blueprint for achieving air quality standards and healthful air in the SoCAB and those portions of the Salton Sea Air Basin that are under SCAQMD's jurisdiction. The 2022 AQMP includes aggressive new regulations and the development of incentive programs to support early deployment of advanced technologies. The two key areas for incentive programs are (1) promoting widespread deployment of available zero emission and low NO<sub>x</sub> technologies and (2) developing new zero emission and ultra-low NO<sub>x</sub> technologies for use in cases where the technology is not currently available. The 2022 AQMP prioritizes distribution of incentive funding in "environmental justice" areas and seek opportunities to focus benefits on the most disadvantaged communities. The 2022 AQMP focuses on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in GHGs and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The AQMP relies on a regional and multi-level partnership of governmental agencies at the federal, state, regional, and local level. These agencies (USEPA, CARB, local governments, Southern California Association of Governments [SCAG] and the SCAQMD) are the primary agencies that implement the AQMP programs. The 2022 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's latest Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. The 2022 AQMP includes integrated strategies and measures to meet the NAAQS. The current status of the SIPs for the SoCAB's nonattainment pollutants are shown below:

- On November 28, 2007, CARB submitted a SIP revision to the USEPA for O<sub>3</sub>, PM<sub>2.5</sub> (1997 Standard), CO, and NO<sub>2</sub> in the SoCAB. This revision is identified as the "2007 South Coast SIP". The 2007 South Coast SIP demonstrates attainment of the federal PM<sub>2.5</sub> standard in the SoCAB by 2014 and attainment of the federal eight-hour O<sub>3</sub> standard by 2023. This SIP also includes a request to reclassify the O<sub>3</sub> attainment designation from "severe" to "extreme". The USEPA approved the redesignation effective June 4, 2010. The "extreme" designation requires the attainment of the eight-hour O<sub>3</sub> standard in the SoCAB by June 2024. CARB approved PM<sub>2.5</sub> SIP revisions in April 2011 and the O<sub>3</sub> SIP revisions in July 2011. The USEPA approved the PM<sub>2.5</sub> SIP in 2013 and has approved 46 of the 61, 1997 eight-hour O<sub>3</sub> SIP requirements. In 2014, the USEPA proposed a finding that the SoCAB has attained the 1997 PM<sub>2.5</sub> standards. In 2016, the USEPA determined that the SoCAB had attained the 1997 PM<sub>2.5</sub> standards; however, the SoCAB was not redesignated as an attainment area because the USEPA had not approved a maintenance plan and additional requirements under the CAA had not been met.
- In 2012, the SCAQMD adopted the 2012 AQMP, which was a regional and multiagency effort (the SCAQMD, CARB, SCAG, and the USEPA). The primary purposes of the 2012 AQMP were to demonstrate attainment of the federal 24-hour PM<sub>2.5</sub> standard by 2014 and to update the USEPA-

approved eight-hour Ozone Control Plan. In 2012, the 2012 AQMP was submitted to CARB and the USEPA for concurrent review and approval for inclusion in the SIP. The 2012 AQMP was approved by CARB on January 25, 2013.

- In 2017, the SCAQMD adopted the 2016 AQMP. The 2016 AQMP includes strategies and measures to meet the following NAAQS:
  - 2008 eight-hour O<sub>3</sub> (75 parts per billion [ppb]) by 2013
  - 2012 Annual PM<sub>2.5</sub> (12 µg/m<sup>3</sup>) by 2025
  - 1997 eight-hour O<sub>3</sub> (80 ppb) by 2023
  - 1979 one-hour O<sub>3</sub> (120 ppb) by 2022
  - 2006 24-hour PM<sub>2.5</sub> (35 µg/m<sup>3</sup>) by 2019
- In 2022, the SCAQMD adopted the 2022 AQMP. In response to the USEPA lowering the primary and secondary O<sub>3</sub> standard levels to 70 ppb, the 2022 AQMP was developed to address the requirements for meeting this standard. The 2022 AQMP explores new and innovative ways to accomplish these goals through incentive programs, efficiency improvements, recognition of co-benefits from other programs, regulatory measures, and other voluntary actions.

### **2.2.2.3 Tanner Air Toxics Act & Air Toxics “Hot Spots” Information and Assessment Act**

CARB’s statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California’s program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the State’s mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics “Hot Spots” Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the “Hot Spots” Act was amended by Senate Bill (SB) 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

### **2.2.3 Local**

#### **2.2.3.1 Southern California Association of Governments**

In April 2024, the SCAG Regional Council adopted the 2024-2050 Regional Transportation Plan/ Sustainable Communities Strategy (2024 RTP/SCS). The 2024 RTP/SCS charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2024 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions. Specifically, the region has been tasked by CARB to achieve a 19 percent per capita reduction by the end of 2035.

#### **2.2.3.2 South Coast Air Quality Management District**

The SCAQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, including the Project Site. The agency's primary responsibility is ensuring that the NAAQS and CAAQS are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the Proposed Project:

- **Rule 212 (Standards for Approving Permits and Issuing Public Notice)**- This rule requires the applicant to show that the equipment used of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment that it may be expected to operate without emitting air contaminants in violation of Section 41700, 4170 or 44300 of the Health and Safety Code or of these rules.
- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible PM are prohibited from crossing any property line. This rule is intended to reduce PM<sub>10</sub> emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM<sub>10</sub> suppression techniques are summarized below.
  - a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
  - b) All onsite roads will be paved as soon as feasible or watered periodically or chemically stabilized.
  - c) All material transported offsite will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
  - d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
  - e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.
- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.
- **Rule 1401 (New Source Review of Toxic Air Contaminants)** – This rule requires new source review of any new, relocated, or modified permit units that emit TACs. The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

### 2.2.3.3 City of Colton General Plan

The City of Colton’s General Plan Land Use Element lists goals and associated policies related to sustainable development and building practices. The goals and policy statements help guide the City council, Planning Commission, committees and boards, and City staff to review and decide whether a land use proposal is consistent with the City’s goals for future growth and development. The goals and policies listed below are pertinent to the Proposed Project’s impact on air quality (City of Colton 2013).

- **Goal LU 4:** Incorporate green building and other sustainable building practices into development projects.
  - 1. Policy LU 4.3: Promote sustainable building practices that go beyond the requirement of Title 24 of the California Administrative Code and encourage energy-efficient design elements.
  - 2. Policy LU 4.4: Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment.

- **Goal LU 5:** Reduce use of energy resources citywide, with a key goal of reducing the City's carbon footprint.
  1. Policy LU 5.1: Require the incorporation of energy conservation features into the design of all new construction and site development, as required by State law and local regulations.
  2. Policy LU 5.2: Provide incentives, as funding opportunities become available, for the installation of energy conservation features in existing multi-family residential and commercial developments, including technical assistance and possible low interest loans.
  3. Policy LU 5.6: Require detailed air quality and climate change analyses for all applications that have the potential to adversely affect air quality and incorporate the analyses into applicable California Environmental Quality Act (CEQA) documents. Projects with the potential to generate significant levels of air pollutants and GHGs, such as manufacturing facilities and site development operations, shall be required to incorporate mitigation into their design and operation, and to utilize the most advanced technological methods feasible.
  4. Policy LU 5.7: Work with SCAQMD and SCAG to implement the AQMP and Regional Transportation Plan/Sustainable Communities Strategy, with the objective of meeting federal and state air quality standards for all pollutants. To ensure that new measures can be practically enforced in the region, participate in future amendments and updates of the AQMP.

#### **2.2.3.4 City of Colton Municipal Code**

The City of Colton's Municipal Code contains the following policies for air quality that would apply to the Proposed Project:

- **§ 18.42.060 (Smoke)**- No operation or activities is permitted to have operations which emit excessive smoke, fumes, or dust or which exceed the requirements, or levels, as specified by the SCAQMD.
- **§ 18.42.070 (Odors)**- All activities shall be operated so as not to emit matter causing unpleasant odors which are perceptible by the average person at or beyond any lot line of the lot containing the activities.
- **§ 18.42.080 (Air Quality)**- No operation or activity shall cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution which can cause damage to health, animals, vegetation, or other forms of property, or which can cause excessive soiling on any other lot. No emission shall be permitted which exceeds the requirements of the SCAQMD or the requirements of any air quality plan adopted by the City.

## 2.3 Air Quality Emissions Impact Assessment

### 2.3.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would do any of the following:

- 1) Conflict with or obstruct implementation of any applicable air quality plan.
- 2) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- 3) Expose sensitive receptors to substantial pollutant concentrations.
- 4) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

#### 2.3.1.1 South Coast Air Quality Management District Regional Thresholds

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the Proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects such as that proposed, as shown in Table 2-4.

<b>Air Pollutant</b>	<b>Construction Activities</b>	<b>Operations</b>
Reactive Organic Gas	75	55
Carbon Monoxide	550	550
Nitrogen Oxide	100	55
Sulfur Oxide	150	150
Coarse Particulate Matter	150	150
Fine Particulate Matter	55	55

Source: SCAQMD 1993 (PM<sub>2.5</sub> threshold adopted June 1, 2007)

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions

exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

**2.3.1.2 South Coast Air Quality Management District Localized Significance Thresholds**

In addition to regional significance thresholds, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). LSTs represent the maximum emissions that can be generated at a project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. The Project Site is located within SCAQMD SRA 34 (Central San Bernardino Valley). Table 2-5 shows the LSTs for a one-, two-, and five-acre project site in SRA 34 with sensitive receptors located within 100 meters of the Project Site.

<b>Table 2-5. Local Significance Thresholds at 100 Meters of a Sensitive Receptor</b>				
<b>Project Size</b>	<b>Pollutant (pounds per day) Construction / Operations</b>			
	<b>NO<sub>2</sub></b>	<b>CO</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
1 Acre	211 / 211	2,141 / 2,141	33 / 8	9 / 3
2 Acres	263 / 263	2,738 / 2,738	42 / 10	12 / 3
5 Acres	378 / 378	4,142 / 4,142	65 / 16	17 / 5

Source: SCAQMD 2009

**2.3.2 Methodology**

Air quality impacts were assessed in accordance with methodologies recommended by the SCAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for San Bernardino County and project information provided by the Project Site Plan.

Total building footprint are calculated for the medical facility and the hotel by dividing the total building square footage by the number of floors. The unenclosed parking spaces have been summed, and the remainder number of parking spaces are allotted to the 3-story enclosed parking garage. The square footage of the hotel pool is estimated in proportion with other site plan dimensions. The remaining square footage is assigned a land use type of non-asphalt surfaces to account for landscaping. The building construction, paving, and architectural coating phases are assumed to occur simultaneously. Operational

emissions are calculated using CalEEMod model defaults for San Bernardino County and amount of units identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2024) to inform the modeling calculations of operational mobile source emissions. Operational area source emissions account for emissions associated with pesticides used for maintenance of lawn areas, parking degreasers, parking lot paint, and landscaping equipment emissions. Energy source emissions account for emissions associated with onsite natural gas combustion at the Project Site.

### **2.3.3 Impact Analysis**

#### **2.3.3.1 Project Construction-Generated Criteria Air Quality Emissions**

##### *Regional Construction Significance Analysis*

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. The basic sources of short-term emissions that will be generated through construction of the Proposed Project would be from ground-disturbing activities and from the operation of the construction vehicles (i.e., trenchers, dump trucks). Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Construction-generated emissions associated the Proposed Project are calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 2-6. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but are considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

<b>Table 2-6. Construction-Related Emissions (Regional Significance Analysis)</b>						
<b>Construction Year</b>	<b>Pollutant (pounds per day)</b>					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Construction Calendar Year One	8.04	33.9	33.1	0.06	9.75	5.40
Construction Calendar Year Two	7.87	18.7	30.1	0.05	2.55	1.08
<i>SCAQMD Regional Significance Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<b>Exceed SCAQMD Regional Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; water exposed surfaces three times daily; and limit speeds on unpaved roads. Building construction, paving and painting are assumed to occur simultaneously.

As shown in Table 2-6, emissions generated during Project construction would not exceed the SCAQMD’s regional thresholds of significance. Therefore, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard, and no health effects from Project criteria pollutants would occur.

*Localized Construction Significance Analysis*

As previously described, the Project is proposing construction and operation of a medical facility, a 112-unit hotel, and associated enclosed and unenclosed parking. The nearest sensitive land use that would be impacted by onsite construction activities consist of the Arrowhead Regional Medical Center bordering the Project Site to the east, approximately 400 feet distant. In order to identify localized, air toxic-related impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards’ Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific level proposed projects.

For this Project, the appropriate SRA for the localized significance thresholds is the Central San Bernardino Valley, SRA 34. LSTs apply to CO, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. As previously described, the SCAQMD has produced lookup tables for projects that disturb one, two and five acres. While the Project Site spans just under nine acres, the Project only proposes to construct approximately 3.83 acres. The remaining 5.1 acres in the western portion of the Project parcel is proposed to be a dedicated conservation area for the Delhi Sands flower-loving fly. Thus, the LST threshold values for a two-acre site were used. Applying the two-acre LST thresholds to Project construction, which could disturb a greater amount of acreage daily (up to 3.83 acres), is conservative. For instance, the two-acre LST thresholds were developed, in part, based on the dispersion of pollutants over a two-acre construction area before exposing sensitive receptors. Thus, applying the two-acre LST thresholds to a project that could disturb up to 3.83 acres daily does not consider the pollutant-

dispersing effect of the dispersion of pollutants over a 3.83-acre site before exposing receptors, and is therefore a lower threshold (more stringent) than one calculated specific to 3.83 acres.

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The Arrowhead Regional Medical Center’s drop-off and pick-up area is located approximately 400 feet, or 122 meters, from the Project Site’s eastern boundary. Therefore, this analysis used LSTs for receptors located at 100 meters. The SCAQMD’s methodology clearly states that “...offsite mobile emissions from a project should not be included in the emissions compared to LSTs.” Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod *onsite* emissions outputs were considered. Table 2-7 presents the results of localized emissions. The LSTs reflect a maximum disturbance of the entire Project Site daily at 100 meters from sensitive receptors.

<b>Table 2-7. Maximum Construction-Related Emissions (Localized Significance Analysis)</b>				
<b>Activity</b>	<b>Onsite Pollutant (pounds per day)</b>			
	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Site Preparation	31.6	30.2	9.04	5.20
Grading	16.3	17.9	3.48	2.00
Building Construction, Paving & Architectural Coating	17.8	22.98	0.75	0.69
<i>SCAQMD Localized Significance Threshold (2 acre of disturbance at 100 meters)</i>	263	2,738	42	12
<b>Exceed SCAQMD Localized Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emissions taken from the year and season, summer or winter, with the highest outputs. Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 25 miles per hour.

Table 2-7 shows that the emissions of these pollutants during construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. Therefore, significant impacts would not occur concerning LSTs during construction activities.

### 2.3.3.2 Project Operations Criteria Air Quality Emissions

#### *Regional Operational Significance Analysis*

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>2</sub> as well as O<sub>3</sub> precursors such as ROGs and NO<sub>x</sub>. Project-generated increases in emissions would be predominantly associated with motor vehicle use from employees and visitors to the

park. Operational air pollutant emissions were based on the number of hotel units and building square footage provided by the Project Site Plan, and traffic information provided by KOA Corporation (2024). Long-term operational emissions attributable to the Project are identified in Table 2-8 and compared to the operational significance thresholds promulgated by the SCAQMD.

<b>Table 2-8. Operational-Related Emissions (Regional Significance Analysis)</b>						
<b>Emission Source</b>	<b>Pollutant (pounds per day)</b>					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Summer Emissions</b>						
Mobile	9.64	9.00	87.7	0.22	20.2	5.22
Area	4.67	0.08	9.23	0.00	0.02	0.01
Energy	0.06	1.01	0.85	0.01	0.08	0.08
<b>Total:</b>	<b>14.37</b>	<b>10.09</b>	<b>97.78</b>	<b>0.23</b>	<b>20.30</b>	<b>5.31</b>
<i>SCAQMD Regional Significance Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<b>Exceed SCAQMD Regional Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Winter Emissions</b>						
Mobile	9.00	9.66	73.20	0.21	20.20	5.22
Area	3.16	0.00	0.00	0.00	0.00	0.00
Energy	0.06	1.01	0.85	0.01	0.08	0.08
<b>Total:</b>	<b>12.22</b>	<b>10.67</b>	<b>74.05</b>	<b>0.22</b>	<b>20.28</b>	<b>5.63</b>
<i>SCAQMD Regional Significance Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<b>Exceed SCAQMD Regional Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emission projections predominately based on CalEEMod model defaults for San Bernardino County and amount of units and square footage identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2024) to inform the modeling calculations of operational mobile source emissions. Operational area source emissions account for emissions associated with pesticides used for maintenance of lawn areas, parking degreasers, parking lot paint, and landscaping equipment emissions. Energy source emissions account for emissions associated with onsite natural gas combustion at the Project Site. CalEEMod Measures T-2 "Increase Job Density" for the Proposed Medical Facility and T-3 "Provide Transit-Oriented Development" were applied to the CalEEMod scenario to be consistent with the Proposed Project operational characteristics.

As shown in Table 2-8, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants during operation.

As identified in Table 2-3, the San Bernardino County portion of the SoCAB is listed as a nonattainment area for federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub> and PM<sub>10</sub> (CARB 2022). O<sub>3</sub> is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 2-7, the Proposed Project would result in increased emissions of the O<sub>3</sub> precursor pollutants ROG and NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>; however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SCAQMD is contained in the SCAQMD 2022 AQMP. The AQMP provides control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SCAQMD are designed to meet the objectives of the AQMP and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SCAQMD for purposes of reducing air pollution and its deleterious health effects.

#### *Localized Operational Significance Analysis*

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project only if the project includes stationary sources (e.g., smokestacks) or attracts heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Project does not include such uses. As previously described, the Project would involve the construction and operation of a medical facility, hotel, and associated enclosed and unenclosed parking with no associated stationary sources. Therefore, in the case of the Proposed Project, the operational phase LST protocol does not need to be applied.

#### **2.3.3.3 Conflict with the 2022 Air Quality Management Plan**

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the Project Site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted and adopted the 2022 AQMP. The 2022 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state and federal air quality standards. The 2022 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the USEPA. The plan's pollutant

control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's latest RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The Project is subject to the SCAQMD's AQMP.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

*Criterion 1:*

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

- a) *Would the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?*

As shown in Tables 2-6, 2-7, and 2-8 above, the Proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during both construction and operations. Therefore, the Proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

- b) *Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?*

As shown in Table 2-6 and 2-8 above, the Proposed Project would be below the SCAQMD regional thresholds for construction and operations. Because the Project would result in less than significant regional emission impacts, it would not delay the timely attainment of air quality standards or AQMP emissions reductions.

*Criterion 2:*

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based, in part, on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the Proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2022 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

- a) *Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2022 AQMP?*

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. SCAG's Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's RTP/SCS provides socioeconomic forecast projections of regional population growth. The City of Colton's General Plan is referenced by SCAG in order to assist forecasting future growth in the city.

The City's General Plan Land Use Plan Map designates the Proposed Project Site as part of the Colton's Hub City Centre Specific Plan (CHCCSP 2016). The Colton's Hub City Centre Specific Plan (CHCCSP) currently designates the Proposed Project Site as "OMU", Office/Mixed Use. The intent of the CHCCSP OMU designation is to provide for uses complementary to the Arrowhead Regional Medical Center, e.g., opportunities for medical related offices, research and development, and services such as pharmacies, medical and equipment supplies. To promote other compatible uses, the land use designation includes flexibility to incorporate Business Parks and Retail. The Proposed Project is consistent with this designation and is not proposing to amend the City General Plan or CHCCSP. Therefore, the Proposed Project would adhere to the land uses envisioned in the General Plan and CHCCSP, and is therefore consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the RTP/SCS and RCPG. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by SCAQMD to develop the 2022 AQMP. The City's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the Proposed Project would be consistent with the projections (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans). Therefore, the Proposed Project would be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans.

Additionally, the Proposed Project would support smart growth principles by maximizing the use of existing infrastructure and expanding medical services to the residents nearby. The Proposed Project would provide new employment opportunities and is in walking distance to residences and local transit stops which could lessen vehicle trips, a source of criteria air pollutants. Additionally, placing a hotel across the street from the Arrowhead Regional Medical Center would enable family members and individuals visiting patients a place to stay which could reduce vehicle trips. The reduction of vehicle trips and associated reduction of criteria air pollutants is a key goal of SCAQMD air quality planning efforts.

The Project would not exceed the population or job growth projections used by SCAQMD to develop the 2022 AQMP. Therefore, the Project would not conflict with the AQMP pollutant inventory forecast, which is based on the City of Colton General Plan, and thus would not conflict with SCAQMD air quality planning efforts.

*b) Would the project implement all feasible air quality mitigation measures?*

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113. SCAQMD Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM<sub>10</sub> emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the Proposed Project meets this consistency criterion.

- c) *Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?*

The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. As previously mentioned, the Proposed Project Site would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a Project on air quality. The Proposed Project would not result in a long-term impact on the region's ability to meet state and federal air quality standards. The Proposed Project's long-term influence would also be consistent with the goals and policies of the SCAQMD's 2022 AQMP.

#### **2.3.3.4 Exposure of Sensitive Receptors to Toxic Air Contaminants**

As previously described, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The SCAQMD defines sensitive receptors as any residence including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes, long term care hospitals, hospices, prisons, and dormitories or similar live-in housing. The nearest sensitive receptors would be the residences located on W San Bernardino Avenue to the north and the Arrowhead Regional Medical Center on the eastern side of N Pepper Avenue. The residences on W San Bernardino Avenue are located approximately 730 feet north of the Project's north boundary and the Arrowhead Regional Medical Center's drop-off and pick-up area is located approximately 400 feet distant from the Proposed Project eastern boundary.

### *Construction-Generated Air Contaminants*

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of DPM, ROG, NO<sub>x</sub>, CO, and PM<sub>10</sub> from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The portion of the SoCAB which encompasses the Project Area is designated as a nonattainment area for federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub> and PM<sub>10</sub> (CARB 2022). Thus, existing O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> levels in the SoCAB are at unhealthy levels during certain periods. However, as shown in Table 2-6 and Table 2-7, the Project would not exceed the SCAQMD regional or localized significance thresholds for construction emissions.

The health effects associated with O<sub>3</sub> are generally associated with reduced lung function. O<sub>3</sub> is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of ROG and NO<sub>x</sub> in the presence of sunlight. The reactivity of O<sub>3</sub> causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O<sub>3</sub> not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O<sub>3</sub> for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term O<sub>3</sub> exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to O<sub>3</sub> may increase the risk of respiratory-related deaths. The concentration of O<sub>3</sub> at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of O<sub>3</sub> and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum O<sub>3</sub> concentration reaches 80 parts per billion. Because the Project would not involve construction activities that would result in O<sub>3</sub> precursor emissions (i.e., ROG or NO<sub>x</sub>) in excess of the SCAQMD thresholds, which are set to be protective of human health and account for cumulative emissions in the SoCAB, the Project is not anticipated to substantially contribute to regional O<sub>3</sub> concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SCAQMD thresholds, which are set to be protective of human health and account for cumulative emissions in the SoCAB. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked

to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary TAC of concern. PM<sub>10</sub> exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM and it contains PM<sub>2.5</sub> exhaust as a subset. As with O<sub>3</sub> and NO<sub>x</sub>, the Project would not generate emissions of PM<sub>10</sub> or PM<sub>2.5</sub> that would exceed the SCAQMD's thresholds. The increases of these pollutants generated by the Proposed Project would not on their own generate an increase in the number of days exceeding the NAAQS or CAAQS standards. Therefore, PM<sub>10</sub> and PM<sub>2.5</sub> emissions, when combined with the existing PM emitted regionally, would have minimal health effect on people located in the immediate vicinity of the Project Site. Additionally, the Project would be required to comply with Rule 403 for fugitive dust control, as described above, which limits the amount of fugitive dust generated during construction. Accordingly, the Project's PM<sub>10</sub> and PM<sub>2.5</sub> emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, Project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Furthermore, the Project has been evaluated against the SCAQMD's LSTs for construction. As previously stated, LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative and can be used to assist lead agencies in analyzing localized impacts associated with Project-specific level of proposed projects. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: *Further-Reduced Health Risk*. As shown in Table 2-7, the emissions of pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> demonstrates that the Project would not adversely impact vicinity sensitive receptors.

#### *Operational Air Contaminants*

The health risk public-notification thresholds adopted by the SCAQMD is 10 excess cancer cases in a million for cancer risk and a hazard index of more than one (1.0) for non-cancer risk. Examples of projects that emit toxic pollutants over long-term operations include oil and gas processing, gasoline dispensing, dry cleaning, electronic and parts manufacturing, medical equipment sterilization, freeways, and rail yards. Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract mobile sources that would spend long periods queuing and idling at the site. The operational emissions are expected to come from vehicle emissions from patients and visitors to the medical office clinic and commercial hotel. However, according to Table 2-7, onsite Project emissions would not result in emissions of criteria pollutants over the SCAQMD's thresholds, which are set to be protective of human health and account for cumulative emissions in the SoCAB. Therefore, there would not be significant concentrations of pollutants at nearby sensitive receptors. The Project would not be a source of TACs. The Project would not result in a high carcinogenic or non-carcinogenic risk during operation.

### *Carbon Monoxide Hot Spots*

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or “hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is designated as in attainment. Detailed modeling of Project-specific CO “hot spots” is not necessary and thus this potential impact is addressed qualitatively.

A CO “hot spot” would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the SCAQMD’s 1992 Federal Attainment Plan for Carbon Monoxide in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD is the air pollution control officer for much of southern California. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). In order to establish a more accurate record of baseline CO concentrations affecting the Los Angeles, a CO “hot spot” analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District, the air pollution control officer for the San Francisco Bay Area, concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

The Proposed Project is anticipated to result in 2,807 daily trips (KOA Corporation 2024). Thus, the Proposed Project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day (or 44,000 vehicles per day) and there is no likelihood of the Proposed Project traffic exceeding CO values.

### **2.3.3.5 Odors**

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. It is expected that the odors associated with the Project's construction would not be concentrated or stagnant near any of the sensitive receptors, specifically the residences to the north or the Arrowhead Regional Medical Center to east. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

According to the SCAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses identified by the SCAQMD as being associated with odors.

## 3.0 GREENHOUSE GAS EMISSIONS

### 3.1 Greenhouse Gas Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. More specifically, experts agree that human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850–1900 in 2011–2020. (Intergovernmental Panel on Climate Change [IPCC] 2023).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH<sub>4</sub> traps over 25 times more heat per molecule than CO<sub>2</sub>, and N<sub>2</sub>O absorbs 298 times more heat per molecule than CO<sub>2</sub>. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO<sub>2</sub>e), which weight each gas by its global warming potential. Expressing GHG emissions in CO<sub>2</sub>e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO<sub>2</sub> were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO<sub>2</sub> is emitted into the atmosphere than is sequestered

by ocean uptake, vegetation, or other forms. Despite the sequestration of CO<sub>2</sub>, human-caused climate change is already causing damaging effects, including weather and climate extremes in every region across the globe (IPCC 2023).

<b>Table 3-1. Summary of Greenhouse Gases</b>	
<b>Greenhouse Gas</b>	<b>Description</b>
CO <sub>2</sub>	Carbon dioxide is a colorless, odorless gas. CO <sub>2</sub> is emitted in a number of ways, both naturally and through human activities. The largest source of CO <sub>2</sub> emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO <sub>2</sub> emissions. The atmospheric lifetime of CO <sub>2</sub> is variable because it is so readily exchanged in the atmosphere. <sup>1</sup>
CH <sub>4</sub>	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH <sub>4</sub> to the atmosphere. Natural sources of CH <sub>4</sub> include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH <sub>4</sub> is about 12 years. <sup>2</sup>
N <sub>2</sub> O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N <sub>2</sub> O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N <sub>2</sub> O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N <sub>2</sub> O is approximately 120 years. <sup>3</sup>

Sources: (1) USEPA 2023a; (2) USEPA 2023b; (3) USEPA 2023c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

### **3.1.1 Sources of Greenhouse Gas Emissions**

In 2024, CARB released the 2024 edition of the *California GHG Emissions from 2000 to 2022: trends of Emissions and Other Indicators* report. In 2022, California emitted 371.1 million metric tons of CO<sub>2</sub>e. This inventory is 2.4 percent lower than in 2021. The 2022 emissions data shows that the State of California is continuing its established long-term trend of GHG emission declines, despite the anomalous emissions

trends from 2019 through 2021, due in large part to the impacts of the COVID-19 pandemic. Overall trends in the Inventory continue to demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross state product (GSP)) is declining. California's GSP increased by 0.7 percent in 2022, and emissions per GSP declined by 3.1 percent from 2021 to 2022. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for approximately 37.7 percent of total GHG emissions in the state. Transportation emissions have decreased 3.6 percent from 2021 levels due to reductions from on-road, rail and, to a lesser extent, intrastate aviation transportation. Emissions from the electricity sector account for 16.1 percent of the Inventory, which is a decrease of 4.1 percent since 2021, despite the growth of in-state solar, wind, and hydropower energy generation. California's industrial sector accounts for the second largest source of the state's GHG emissions in 2022, accounting for 19.6 percent, which saw a decrease of 2 percent since 2021 (CARB 2024b).

## **3.2 Regulatory Framework**

### **3.2.1 State**

#### **3.2.1.1 Executive Order S-3-05**

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

#### **3.2.1.2 Assembly Bill 32 Climate Change Scoping Plan and Updates**

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 required CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlined measures to meet the 2020 GHG reduction goals. California exceeded the target of reducing GHG emissions to 1990 levels by the year 2017.

The Scoping Plan is required by AB 32 to be updated at least every five years. The latest update, the 2022 Scoping Plan Update, outlines strategies and actions to reduce GHG emissions in California. The plan focuses on achieving the state's goal of reaching carbon neutrality by 2045 and reducing GHG emissions to 40 percent below 1990 levels by 2030. The plan includes a range of strategies across various sectors, including transportation, industry, energy, and agriculture. Some of the key strategies include transitioning to zero-emission vehicles, expanding renewable energy sources, promoting sustainable land use practices, implementing a low-carbon fuel standard, and reducing emissions from buildings. Additionally, the plan addresses equity and environmental justice by prioritizing investments in communities most impacted by

pollution and climate change. The plan also aims to promote economic growth and job creation through the transition to a low-carbon economy.

### **3.2.1.3 Senate Bill 32 of 2016**

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030 (the other provisions of AB 32 remained unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provided a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies. The 2017 Scoping Plan also placed an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with Statewide per capita goals of no more than 6 metric tons of CO<sub>2e</sub> by 2030 and 2 metric tons of CO<sub>2e</sub> by 2050.

### **3.2.1.4 Assembly Bill 197 of 2016**

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

### **3.2.1.5 Assembly Bill 1279 of 2022**

In September 2022, Governor Brown signed AB 1279, The California Climate Crisis Act, which requires California to achieve carbon neutrality as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. AB 1279 also requires that by 2045 statewide anthropogenic GHG emissions be reduced to at least 85 percent below 1990 levels and directs CARB to ensure that its scoping plan identifies and recommends measures to achieve these goals. AB 1279 also directs CARB to identify policies and strategies to enable carbon capture, utilization, and storage and CO<sub>2</sub> removal technologies to meet emission reduction goals. In addition, CARB is required to submit an annual report on progress in achieving the 2022 Scoping Plan's goals.

In response to the passage of AB 1279 and the identification of the 2045 GHG emissions reduction target, CARB published the Final 2022 Climate Change Scoping Plan in November 2022 (2022 Update). The 2022 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying a new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Update includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development,

increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Update assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan; addresses recent legislation and direction from Governor Newsom; extends and expands upon these earlier plans; and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Update, "the plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the State's natural and working lands and using a variety of mechanical approaches." Specifically, the 2022 Update achieves the following:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Update includes emissions and carbon sequestration in natural and working lands and explores how they contribute to long-term climate goals. Under the Scoping Plan Scenario, California's 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. Cap-and-trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet these GHG emissions reduction goals and achieve carbon neutrality no later than 2045. The 2022 Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

### **3.2.1.6 Executive Order N-79-20**

Governor Gavin Newsom signed an executive order on September 23, 2020, that would phase out sales of new gas-powered passenger cars by 2035 with an additional 10-year transition period for heavy vehicles. The State would not restrict used car sales, nor forbid residents from owning gas-powered vehicles, meaning that the overall reduction in GHG emissions would likely not substantially reduce GHG emissions from vehicles for many years after the ban goes into effect.

### **3.2.1.7 Senate Bill 100 of 2018**

In 2018, SB 100 was signed codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

### **3.2.1.8 Senate Bill 1020 of 2022**

SB 1020, the Clean Energy, Jobs, and Affordability Act of 2022, adds interim targets to the policy framework originally established in SB 100 to require renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all retail electricity sales by 2040. Additionally, the bill requires all state agencies to rely on 100 percent renewable energy and zero-carbon resources to serve their own facilities by 2035. This bill also requires that CARB's Scoping Plan workshops be held in non-attainment areas and requires the California Public Utilities Commission, the California Energy Commission, and CARB to create a joint report on electricity reliability.

### **3.2.1.9 Senate Bill 375 of 2008**

SB 375 set forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHG emissions. SB 375 was adopted with a goal of reducing fuel consumption and GHG emissions from cars and light trucks. Under SB 375, CARB was required to set GHG reduction targets for each metropolitan region for 2020 and 2035, and each of California's metropolitan planning organizations was responsible to prepare a sustainable communities strategy that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning. The SCAG Regional Council adopted the 2024 RTP/SCS to remain compliant with SB 375.

### **3.2.1.10 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings**

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2022 California Building Codes include provisions related to energy efficiency to reduce energy consumption and GHG emissions from buildings. Some of the key energy efficiency components of the codes are:

1. Energy Performance Requirements: The codes specify minimum energy performance standards for the building envelope, lighting, heating and cooling systems, and other components.

2. Lighting Efficiency: The codes require that lighting systems meet minimum efficiency standards, such as the use of energy-efficient light bulbs and fixtures.
3. HVAC Systems: The codes establish requirements for heating, ventilation, and air conditioning (HVAC) systems, including the use of high-efficiency equipment, duct sealing, and controls.
4. Building Envelope: The codes include provisions for insulation, air sealing, glazing, and other building envelope components to reduce energy loss and improve indoor comfort.
5. Renewable Energy: The codes encourage the use of renewable energy systems, such as photovoltaic panels and wind turbines, to reduce dependence on non-renewable energy sources.
6. Commissioning: The codes require the commissioning of building energy systems to ensure that they are installed and operate correctly and efficiently.

Overall, the energy efficiency provisions of the 2022 California Building Codes aim to reduce the energy consumption of buildings, lower energy costs for building owners and occupants, and reduce the environmental impact of the built environment. The 2022 Building Energy Efficiency Standards improve upon the 2019 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The exact amount by which the 2022 Building Codes are more efficient compared to the 2019 Building Codes would depend on the specific provisions that have been updated and the specific building being considered. However, in general, the 2022 Building Codes have been updated to include increased requirements for energy efficiency, such as higher insulation and air sealing standards, which are intended to result in more efficient buildings. The 2022 standards are a major step toward meeting Zero Net Energy.

### **3.2.2 Local**

#### **3.2.2.1 South Coast Air Quality Management District**

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the Draft AQMD Staff CEQA GHG Significance Thresholds. These thresholds have not been finalized and continue to be developed through the working group.

The Draft AQMD Staff CEQA GHG Significance Thresholds guidance document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association (CAPCOA), explored various approaches for establishing a significance threshold for GHG emissions and was described as a “work in progress” of efforts to date. However, the draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. In December 2008, the SCAQMD adopted a 10,000 metric tons of CO<sub>2</sub>e per year threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. SCAQMD has continued to consider adoption of significance thresholds for

residential and general land use development projects. The most recent proposal, issued in September 2010, used the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2 Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 metric tons of CO<sub>2</sub>e per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 metric tons of CO<sub>2</sub>e per year), commercial projects (1,400 metric tons of CO<sub>2</sub>e per year), and mixed-use projects (3,000 metric tons of CO<sub>2</sub>e per year). Under option 2, a single numerical screening threshold of 3,000 metric tons of CO<sub>2</sub>e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions by 40 percent by 2035. The efficiency-based threshold of 3.0 metric tons of CO<sub>2</sub>e per service population (defined as the people that work and/or congregate on the Project Site) per year in 2035. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The SCAQMD has not announced when staff are expecting to present a finalized version of its GHG thresholds to the governing board.

These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the SoCAB, industry groups, and environmental and professional organizations. These thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance to CEQA practitioners with regard to determining whether GHG emissions from a proposed land use project are significant.

### **3.2.2.2 Southern California Association of Governments**

In April 2024, the SCAG Regional Council adopted the *2024-2050 Regional Transportation Plan/ Sustainable Communities Strategy* (2024 RTP/SCS). The 2024 RTP/SCS charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a

collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2024 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions. Specifically, the region has been tasked by CARB to achieve a 19 percent per capita reduction by the end of 2035.

### 3.2.2.3 City of Colton General Plan

The City of Colton's General Plan Land Use Element lists goals and associated policies related to sustainable building development and building practices. The goals and policy statements help guide the City council, Planning Commission, committees and boards, and City staff to review land use proposals and decide whether land use proposals are consistent with the City's goals for future growth and development. The goals and policies related to GHG emissions are listed below and are pertinent to the Proposed Project (City of Colton 2013).

- **Goal LU 4:** Incorporate green building and other sustainable building practices into development projects.
  1. Policy LU 4.2: Facilitate the use of green building standards and Leadership in Energy and Environmental Design or similar programs in both private and public projects.
  2. Policy LU 4.3: Promote sustainable building practices that go beyond the requirement of Title 24 of the California Administrative Code and encourage energy-efficient design elements.
  3. Policy LU 4.4: Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment.
- **Goal LU 5:** Reduce use of energy resources citywide, with a key goal of reducing the City's carbon footprint.
  1. Policy LU 5.1: Require the incorporation of energy conservation features into the design of all new construction and site development, as required by State law and local regulations.
  2. Policy LU 5.2: Provide incentives, as funding opportunities become available, for the installation of energy conservation features in existing multi-family residential and commercial developments, including technical assistance and possible low interest loans.
  3. Policy LU 5.4: Support the ongoing efforts of the CARB to implement AB 32 and SB 375, and fully follow any new AB 32 and SB 375-related regulations.

4. Policy LU 5.5: Develop and implement GHG emissions reduction measures, including discrete, early action GHG reducing measures that are technologically feasible and cost effective.
5. Policy LU 5.6: Require detailed air quality and climate change analyses for all applications that have the potential to adversely affect air quality and incorporate the analyses into applicable California Environmental Quality Act (CEQA) documents. Projects with the potential to generate significant levels of air pollutants and GHGs, such as manufacturing facilities and site development operations, shall be required to incorporate mitigation into their design and operation, and to utilize the most advanced technological methods feasible.
6. Policy LU 5.7: Work with SCAQMD and SCAG to implement the AQMP and Regional Transportation Plan/Sustainable Communities Strategy, with the objective of meeting federal and state air quality standards for all pollutants. To ensure that new measures can be practically enforced in the region, participate in future amendments and updates of the AQMP.

#### **3.2.2.4 City of Colton Climate Action Plan**

The City of Colton adopted a Climate Action Plan (2015 CAP) on November 3, 2015. The 2015 CAP contained guidance on the City of Colton's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The City's GHG emissions reduction target was 15 percent below the 2008 emission level by 2020, which aligned with California's statewide reduction target. The 2015 CAP included mitigation measures such as increasing solar installation, tree planting programs, sustainable transportation efforts, and waste and wastewater emission reduction measure. In December of 2023, the City Council rescinded the 2015 CAP and adopted the City of Colton 2023 CAP Update, which includes GHG Emissions Screening Tables, and consists of a relevant GHG inventory for the City of Colton, implementation actions for Colton, and Colton GHG reduction measures (City of Colton 2023). The 2023 CAP Update is informed by the technical information presented in the San Bernardino County's Regional GHG Reduction Plan Update which was adopted in June of 2023. The 2023 CAP Update includes detailed descriptions of all reduction strategies discussed in the County's Regional GHG Reduction Plan Update. Strategies are organized into state and local categories. The GHG emissions reduction strategies that are pertinent to the Proposed Project are as follows:

State Measures:

- **State-2. Title 24 Standards for Non-Residential and Residential Buildings (Energy Efficiency Standards and CALGreen):** Requires that building shells and building components be designed to conserve energy and water. Note that in some instances, implementation of the CALGreen voluntary measures has been identified by local jurisdictions as part of their selected local measures.
- **State-3. SB 350 Clean Energy and Pollution Reduction Act:** SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030.

- **State-4. AB 1470 (Huffman), AB797 Solar Water Heating:** AB1470 created a 10-year incentive program funded at \$25 million per year to encourage the installation of 200,000 solar water heating systems that offset natural gas use in homes and businesses throughout the state.

Local Measures:

- **Energy-1. Energy Efficiency Incentives and programs to promote Energy Efficiency for Existing Buildings:** Promote energy efficiency in nonresidential buildings. Promote individualized energy management services for large energy users. Remove funding barriers to energy-efficiency improvements. Participate in programs (national, state, or regional) that provide innovative, low-interest financing for energy-efficiency and alternative energy projects. Promote incentives to encourage the use of energy-efficient equipment and lighting.
- **Energy-3. Building Electrification:** Adopt building electrification targets and incentives, for both new commercial and residential buildings and retrofits. Establish a goal that a percentage of new and existing buildings use electric HVAC and water heating systems.
- **Energy-4. Solar Installations for New Commercial/Industrial Development:** Establish a goal for solar installations on new commercial and industrial development to be achieved before 2030.
- **Land Use-2. Urban Tree Planting:** Establish a jurisdiction-wide tree planting goal or tree preservation goal. This measure will reduce energy consumption and associated GHG emissions in the building energy sector by reducing the heat island effect.
- **On-Road-2. Encourage Use of Mass Transit, Carpooling, Ridesharing, and Telecommuting:** Commute Trip Reduction programs aim to reduce commute trips and VMT [vehicle miles traveled] through various strategies. The strategies include encouraging the use of mass transit, carpooling, ridesharing, and telecommuting.
- **On-Road-5. Community Fleet Electrification:** Hybrid electric vehicles, plug-in hybrid vehicles, and all-electric vehicles (EVs) produce lower emissions than conventional vehicles. All EV types emit at least 40% less GHG emissions than conventional vehicles. However, more than 95% of people still drive conventional gasoline or diesel vehicles, so programs to encourage the use of EV or hybrid vehicle ownership are greatly needed.
- **Off-Road Equipment-2. Idling Ordinance:** Adopt an ordinance that limits idling time for heavy-duty diesel trucks beyond CARB or local air district regulations and if not already required as part of CEQA mitigation. As part of permitting requirements or city contracts, encourage contractors to submit a construction vehicle management plan that includes such things as idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all on-site equipment. State law currently requires all off-road equipment fleets to limit idling to no more than 5 minutes.
- **Waste-1. Increased Waster Diversion:** Exceed the waste diversion goal (75%) required by AB 341 by adopting citywide waste goals to divert more than 75% of waste. In instances where cities

operate their own waste services programs, they will have responsibility to expand or establish composting, recycling, and yard waste programs to residences and businesses.

- **Water-1. Require Adoption of the Voluntary CALGreen Water Efficiency Measures for New Construction:** Require adoption of the voluntary CALGreen water efficiency measures (at least Tier 1) for new construction. CALGreen voluntary measures recommended use of certain water-efficient appliances, plumbing and irrigation systems, as well as more aggressive water-savings targets.
- **Water-3. Encourage Water-Efficient Landscaping Practices:** Encourage water-efficient landscaping practices. Adopt a landscaping water conservation ordinance that exceeds the requirements in the Model Landscape Ordinance (AN 1881).

As such, the Proposed Project would be subject to implementation of measures consistent with the CAP GHG emissions reductions strategies.

### **3.3 Greenhouse Gas Emissions Impact Assessment**

#### **3.3.1 Thresholds of Significance**

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to greenhouse gas emissions if it would:

- 1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- 2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The Appendix G thresholds for GHG emissions do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that “[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA’s requirements for cumulative impact analysis (see CEQA Guidelines Section 15130). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

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

The significance of the Project’s GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) and the SCAQMD Tier 2 GHG threshold by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Specifically, the Project is evaluated for consistency with CARB’s 2022 Scoping Plan, the City of Colton’s CAP, and with SCAG’s 2024 RTP/SCS.

### **3.3.2 Methodology**

Where GHG emission quantification was required, emissions were modeled using CalEEMod, version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated GHG emissions were calculated using CalEEMod model defaults for San Bernardino County and Project information provided by the Site Plan. Total building square footage footprint was calculated for the hotel and medical facility by dividing the total building square footage by the number of floors. The square footage of the enclosed, 3-story parking garage was calculated by subtracting the CalEEMod default

area for the total number of unenclosed spots by the 321 parking spots in the Proposed Project Site Plan. The area of the hotel pool is calculated, and for the purposes of this analysis, the remaining area was attributed to landscaping to account for water use. The building construction, paving, and architectural coating phases are assumed to occur simultaneously. Operational GHG emissions were calculated using CalEEMod model defaults for San Bernardino County and amount of units identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2024) to inform the modeling calculations of operational mobile source emissions. Per the traffic impact analysis report, the Proposed Project is expected to generate approximately 2,807 daily vehicle trips (KOA Corporation 2024).

### 3.3.3 Generation of GHG Emissions

#### *Project Construction*

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3-2 illustrates the specific construction generated GHG emissions that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

<b>Table 3-2. Construction-Related Greenhouse Gas Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/ Year)</b>
Construction Calendar Year One	584
Construction Calendar Year Two	141
<b>Total Construction Emissions</b>	<b>725</b>

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Project construction generated GHG emissions were calculated using CalEEMod model defaults for San Bernardino County and information from the Proposed Project Site Plan.

As shown in Table 3-2, Project construction would result in the generation of approximately 725 metric tons of CO<sub>2</sub>e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. Consistent with SCAQMD recommendations, Project construction GHG emissions have been amortized of the expected life of the Project, which is considered to be 30 years per the SCAQMD and added to the annual average operational emissions (see Table 3-3).

#### *Project Operations*

Operation of the Project would result in an increase in GHG emissions primarily associated with mobile sources. Long-term operational GHG emissions attributed to the Project are identified in Table 3-3.

<b>Table 3-3. Operational-Related Greenhouse Gas Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/ Year)</b>
Construction Emissions (Amortized)	24
Mobile	2,970
Area	4
Energy	727
Water	29
Waste	224
Refrigeration	19
<b>Total</b>	<b>3,997</b>

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emission projections predominately based on CalEEMod model defaults for San Bernardino County and amount of units identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2024) to inform the modeling calculations of operational mobile source emissions. CalEEMod Measures T-2 "Increase Job Density" for the Proposed Medical Facility and T-3 "Provide Transit-Oriented Development" were applied to the CalEEMod scenario to be consistent with the Proposed Project operational characteristics.

As shown in Table 3-3, the Project would generate 3,997 metric tons of CO<sub>2</sub>e annually.

### **3.3.4 Impact Analysis**

#### **3.3.4.1 Generation of Greenhouse Gas Emissions Resulting in Conflicts with any Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases**

##### *2022 California Air Resources Board Scoping Plan*

CARB's 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high global warming potential; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines Section 15183.5.

Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include implementing SB 100, which would achieve 100 percent clean electricity by 2045; achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and implementing the Advanced Clean Fleets regulation to deploy zero-emission vehicles (ZEVs) buses and trucks. Additional transportation policies include the Off-

Road Zero-Emission Targeted Manufacturer Rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.

As indicated above, GHG reductions are also achieved as a result of State of California energy and water efficiency requirements for new residential developments. These efficiency improvements correspond to reductions in secondary GHG emissions. For example, in California, most of the electricity that powers homes are derived from natural gas combustion. Therefore, energy saving measures, such as Title 24, reduces GHG emissions from the power generation facilities by reducing load demand.

The 2022 Scoping Plan Appendix D provides local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. The 2022 Scoping Plan Appendix D focuses on Residential and Mixed-Use Projects.

The 2022 Scoping Plan Appendix D lists potential actions that support the state's climate goals. However, the 2022 Scoping Plan notes that the applicability and performance of the actions may vary across the regions. The document is organized into two categories (A) examples of plan-level GHG reduction actions that could be implemented by local governments and (B) examples of on-site project design features, mitigation measures, that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency.

The Project would include a number of the 2022 Scoping Plan standard conditions and mitigation measures for construction and operation. For example, the 2022 Scoping Plan's construction actions include enforcing idling time restrictions on construction vehicles and requiring construction vehicles to operate highest tier engines commercially available.

The Project would include a majority of the feasible operational mitigation measures listed in the 2022 Scoping Plan Appendix D as design features. Some of the recommended operational measures would include providing bicycle parking, creating on- and off-site safety improvements for bike, pedestrian, and transit connections, requiring solar panels, drought-tolerant landscaping, and energy conserving appliances.

As identified in Table 3-4 below, the Project would be consistent with all applicable plan goals and applicable regulatory programs designed to reduce GHG emissions generated by land use projects. The Project would be subject to compliance with all building codes in effect at the time of construction, which include energy conservation measures mandated by California Building Standards Code Title 24 – Energy Efficiency Standards. Because Title 24 standards require energy conservation features in new construction (e.g., high- efficiency lighting, high-efficiency heating, ventilating, and HVAC systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures), they indirectly regulate and reduce GHG emissions. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle.

As shown in Table 3-3, approximately 92 percent of the Project's emissions are from energy and mobile sources, which would be further reduced by the 2022 Scoping Plan actions described above. The City has no control over vehicle emissions (approximately 74 percent of the Project's total emissions). However, these emissions would decline in the future due to statewide measures, as well as cleaner technology and fleet turnover. Several of the state's plans and policies would contribute to a reduction in the Project's mobile source emissions, including the following:

- CARB's Advanced Clean Truck Regulation: Adopted in June 2020, CARB's Advanced Clean Truck Regulation requires truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.
- Executive Order N-79-20: This Executive Order establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, to be zero-emission by 2035 and all medium and heavy-duty vehicles to be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent."
- CARB's Mobile Source Strategy: CARB's Mobile Source Strategy takes an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's targets by increasing the adoption of ZEV buses and trucks.
- CARB's Sustainable Freight Action Plan: The Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the Project Site and may include existing trucks or new trucks that are part of the Statewide goods movement sector.
- CARB's Emissions Reduction Plan for Ports and Goods Movement: CARB's Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.

While these measures are not directly applicable to the Project, any activity associated with goods movement would be required to comply with these measures as adopted. The Project would not obstruct or interfere with efforts to increase ZEVs or state efforts to improve system efficiency. Compliance with applicable state standards (e.g., continuation of the Cap-and-Trade regulation; CARB's Mobile Source Strategy, Sustainable Freight Action Plan, and Advanced Clean Truck Regulation; Executive Order N-79-20; SB 1020/renewable electricity portfolio improvements that require renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all retail electricity sales by 2040, etc.) would ensure consistency with state and regional GHG reduction planning efforts, including the 2022 Scoping Plan. It is also noted that the Project would not convert any Natural and Working

Lands (NWL) and/or decrease the state’s urban forest carbon stock, which are areas of emphasis in the 2022 Scoping Plan.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that Project operations would benefit from applicable measures enacted to meet state GHG reduction goals. The Project would not impede the state’s progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. As such, impacts related to consistency with the 2022 Scoping Plan, as further shown in Table 3-4, would be less than significant, and no mitigation is required.

<b>Table 3-4. Project Consistency with the Applicable Scoping Plan Measures</b>			
<b>Scoping Plan Sector</b>	<b>Scoping Plan Measure</b>	<b>Implementing Regulations</b>	<b>Project Consistency</b>
Transportation	California Cap-and Trade Program Linked to Western Climate Initiative	Regulation for the California Cap on GHG Emissions and Market-Based Compliance Mechanism October 20, 2015 (CCR 95800)	<b>Consistent.</b> The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects’ electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and combustion of other fossil fuels not directly covered at large sources in the Program’s first compliance period. The Proposed Project would not conflict with implementation of the Cap-and-Trade Program and would indirectly be consistent with regard to the use of electricity and fuel.
	California Light-Duty Vehicle GHG Standards	Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles Pavley I 2005 Regulations to Control GHG	<b>Consistent.</b> This measure applies to all new vehicles starting with model year 2012. The Project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles, model year 2012 and later, associated with Project construction

		Emissions from Motor Vehicles	and operation would be required to comply with the Pavley emissions standards.
		2012 LEV III California GHG and Criteria Pollutant Exhaust and Evaporative Emission Standards	<b>Consistent.</b> The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with Project construction and operations would be required to comply with LEV III standards.
	Low Carbon Fuel Standard	2009 readopted in 2015. Regulations to Achieve GHG Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480	<b>Consistent.</b> This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. It is assumed that any motor vehicles associated with Project construction and operations would be consistent with the measure and utilize low carbon transportation fuels.
	Regional Transportation-Related GHG Targets	SB 375. Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28	<b>Consistent.</b> The Project would provide development in the region that is consistent with the growth projections in the 2024 RTP/SCS. The Project proposes a medical facility, hotel, parking accommodations, and other site improvements in an already developed area of the city and will increase employment opportunities and access to healthcare for local residents. The Proposed Project is consistent with the City's General Plan land use designation of mixed-use, office space. The Project is therefore consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the 2024 RTP/SCS and RCPG.
	Goods Movement	Goods Movement Action Plan January 2007	<b>Not Applicable.</b> The Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
	Medium/Heavy-Duty Vehicle	2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer GHG Regulation	<b>Consistent.</b> This measure applies to medium- and heavy-duty vehicles that operate in the state. The Project would not conflict with implementation of this measure. Medium- and heavy-duty vehicles associated with Project construction would be required to comply with this regulation
	High Speed Rail	Funded under SB 862	<b>Not Applicable.</b> This is a Statewide measure that cannot be implemented by a project applicant or Lead Agency
	Electricity and Natural Gas	Energy Efficiency	Title 20 Appliance Efficiency Regulation

		Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential Building	would be subject to compliance with the latest energy efficiency standards.
		Title 24 Part 11 California Green Building Code Standards	
	Renewable Portfolio Standard/Renewable Electricity Standard	2010 Regulation to Implement the Renewable Electricity Standard (33% 2020)	<b>Consistent.</b> The Project would obtain electricity from the electric utility, Southern California Edison (SCE). SCE obtained 30.9 percent of its power supply from renewable sources in 2020 and includes 50 percent and 100 percent renewable Green Rate options. Therefore, the utility would provide power to the Project that would be is comprised of a greater percentage of renewable sources.
	Million Solar Roofs Program	SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030)	
Million Solar Roofs Program	Tax Incentive Program	<b>Consistent.</b> This measure is to increase solar use throughout California, which is being done by various electricity providers and existing solar programs. The program provides incentives that are in place at the time of construction.	
Water	Water	Title 24 Part 11 California Green Building Code Standards	<b>Consistent.</b> The Project would comply with the CALGreen Code, which require a 20 percent reduction in indoor water use.
		SBX 7-7—The Water Conservation Act of 2009	
		Model Water Efficient Landscape Ordinance	
Green Buildings	Green Building Strategy	Title 24 Part 11 California Green Building Code Standards	<b>Consistent.</b> The state is required to increase use of green building practices. The Project would implement required green building strategies through existing regulations that require the Project to comply with various CALGreen Code standards.
Industry	Industrial Emissions	2010 CARB Mandatory Reporting Regulation	<b>Not Applicable.</b> The Mandatory Reporting Regulation requires facilities and entities with more than 10,000 metric tons of CO <sub>2e</sub> of combustion and process emissions, all facilities belonging to certain industries, and all electric power entities to submit an annual GHG emissions data report directly to CARB. The Proposed Project would not exceed the 10,000 metric ton of CO <sub>2e</sub>

			threshold, and the majority of the Proposed Project GHG emissions are from mobile sources. Therefore, this regulation would not apply.
Recycling and Waste Management	Recycling and Waste	Title 24 Part 11 California Green Building Code Standards	<b>Consistent.</b> The Project would not conflict with implementation of these measures. The Project is required to achieve the recycling mandates via compliance with the CALGreen Code.
		AB 341 Statewide 75 Percent Diversion Goal	
Forests	Sustainable Forests	Cap-and-Trade Offset Projects	<b>Not Applicable.</b> The Project is in an area designated for urban uses. No forested lands exist on the site.
High Global Warming Potential	High Global Warming Potential Gases	CARB Refrigerant Management Program CCR 95380	<b>Consistent.</b> The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial refrigerators and cold storage systems. The Project would not conflict with the refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap-and-Trade Offset Projects for Livestock and Rice Cultivation	<b>Not Applicable.</b> No grazing, feedlot, or other agricultural activities that generate manure occur currently on site or are proposed by the Project.

In conclusion, the Project does not conflict with the applicable plans and regulatory programs that are discussed above, and therefore with respect to this particular threshold, the Project does not have a significant impact.

*City of Colton Climate Action Plan*

The City of Colton adopted a CAP (2015 CAP) on November 3, 2015. The 2015 CAP contained guidance on the City of Colton’s GHG Inventory reduction goals, policies, guidelines, and implementation programs. The City’s GHG emissions reduction target was 15 percent below the 2008 emission level by 2020, which aligned with California’s statewide reduction target. The 2015 CAP included mitigation measures such as increasing solar installation, tree planting programs, sustainable transportation efforts, and waste and wastewater emission reduction measure. In December of 2023, the City Council rescinded the 2015 CAP and adopted the City of Colton 2023 CAP Update, which includes GHG Emissions Screening Tables, and consists of a relevant GHG inventory for the City of Colton, implementation actions for Colton, and Colton GHG reduction measures (Colton City Council 2023). The 2023 CAP Update is informed by the technical information presented in the San Bernardino County’s Regional GHG Reduction Plan Update which was adopted in June of 2023. The 2023 CAP Update includes detailed descriptions of all reduction strategies discussed in the County’s Regional GHG Reduction Plan Update. Strategies are organized into state and local categories. The GHG emissions reduction strategies that are pertinent to the Proposed Project are as follows:

State Measures:

- **State-2. Title 24 Standards for Non-Residential and Residential Buildings (Energy Efficiency Standards and CALGreen):** Requires that building shells and building components be designed to conserve energy and water. Note that in some instances, implementation of the CALGreen voluntary measures has been identified by local jurisdictions as part of their selected local measures.
- **State-3. SB 350 Clean Energy and Pollution Reduction Act:** SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030.
- **State-4. AB 1470 (Huffman), AB797 Solar Water Heating:** AB1470 created a 10-year incentive program funded at \$25 million per year to encourage the installation of 200,000 solar water heating systems that offset natural gas use in homes and businesses throughout the state.

Local Measures:

- **Energy-1. Energy Efficiency Incentives and programs to promote Energy Efficiency for Existing Buildings:** Promote energy efficiency in nonresidential buildings. Promote individualized energy management services for large energy users. Remove funding barriers to energy-efficiency improvements. Participate in programs (national, state, or regional) that provide innovative, low-interest financing for energy-efficiency and alternative energy projects. Promote incentives to encourage the use of energy-efficient equipment and lighting.
- **Energy-3. Building Electrification:** Adopt building electrification targets and incentives, for both new commercial and residential buildings and retrofits. Establish a goal that a percentage of new and existing buildings use electric HVAC and water heating systems.
- **Energy-4. Solar Installations for New Commercial/Industrial Development:** Establish a goal for solar installations on new commercial and industrial development to be achieved before 2030.
- **Land Use-2. Urban Tree Planting:** Establish a jurisdiction-wide tree planting goal or tree preservation goal. This measure will reduce energy consumption and associated GHG emissions in the building energy sector by reducing the heat island effect.
- **On-Road-2. Encourage Use of Mass Transit, Carpooling, Ridesharing, and Telecommuting:** Commute Trip Reduction programs aim to reduce commute trips and VMT through various strategies. The strategies include encouraging the use of mass transit, carpooling, ridesharing, and telecommuting.
- **On-Road-5. Community Fleet Electrification:** Hybrid electric vehicles, plug-in hybrid vehicles, and all-electric vehicles (EVs) produce lower emissions than conventional vehicles. All EV types emit at least 40% less GHG emissions than conventional vehicles. However, more than 95% of people still drive conventional gasoline or diesel vehicles, so programs to encourage the use of EV or hybrid vehicle ownership are greatly needed.

- **Off-Road Equipment-2. Idling Ordinance:** Adopt an ordinance that limits idling time for heavy-duty diesel trucks beyond CARB or local air district regulations and if not already required as part of CEQA mitigation. As part of permitting requirements or city contracts, encourage contractors to submit a construction vehicle management plan that includes such things as idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all on-site equipment. State law currently requires all off-road equipment fleets to limit idling to no more than 5 minutes.
- **Waste-1. Increased Waste Diversion:** Exceed the waste diversion goal (75%) required by AB 341 by adopting citywide waste goals to divert more than 75% of waste. In instances where cities operate their own waste services programs, they will have responsibility to expand or establish composting, recycling, and yard waste programs to residences and businesses.
- **Water-1. Require Adoption of the Voluntary CALGreen Water Efficiency Measures for New Construction:** Require adoption of the voluntary CALGreen water efficiency measures (at least Tier 1) for new construction. CALGreen voluntary measures recommended use of certain water-efficient appliances, plumbing and irrigation systems, as well as more aggressive water-savings targets.
- **Water-3. Encourage Water-Efficient Landscaping Practices:** Encourage water-efficient landscaping practices. Adopt a landscaping water conservation ordinance that exceeds the requirements in the Model Landscape Ordinance (AN 1881).

As such, the Proposed Project would be subject to implementation of measures consistent with the CAP GHG emissions reductions strategies. Implementing mitigations consistent with the City's CAP strategies for land use development will greatly reduce the regional GHG emissions and facilitate progress towards statewide emission reduction targets. The City ensures all applicable provisions of the CAP are incorporated into projects and their permits through development review and applications of conditions of approval as applicable. Furthermore, all of the applicable and feasible provisions of the City's GHG-reduction program as promulgated by its CAP will be incorporated into the Proposed Project as a requirement of mitigation measure GHG-1.

#### Mitigation Measure

**GHG-1:** Prior to the certificate of construction-related permits for the Pepper Development Project, the Project Applicant shall demonstrate to the satisfaction of the City of Colton Planning Division that the following measures are implemented.

- Consistent with CAP Measures Energy-1, Energy-3, and Energy-4, all Project buildings shall adhere to Title 24 standards and implement Tier 1 and Tier 2 Green Building Ratings, such as LEED, Build It Green, or Energy Star certifications, to the satisfaction of the City of Colton Planning Division.
- Consistent with CAP Measure Land Use-2, the Proposed Project landscaping should include tree planting to provide shade which will reduce energy consumption and associated GHG emissions in the building energy sector by reducing the heat island effect.

- Consistent with CAP Measure On-Road-2, the medical facility and hotel staff should be knowledgeable about rideshare and public transit options for transport of visitors. Additionally, the enclosed parking garage should designate a certain percentage of desirable parking spaces for ridesharing vehicles and/or charge for parking.
- Consistent with CAP Measure On-Road-5, the Proposed Project should include electric vehicle (EV) charging stations and EV parking stalls to promote use of electric vehicles.
- Consistent with CAP Measure Off-Road Equipment-2, all construction equipment must follow the City's idling ordinances.
- Consistent with CAP Measure Waste-1, the medical facility and hotel operators shall contact the City of Colton's Recycling Coordinator, as required by AB 341, to coordinate the availability of assessable recycling bins on site in the case that the Proposed Project generates more than four cubic yards of waste per week. Additionally, the medical facility and hotel operators shall coordinate with the City of Colton's Recycling Coordinator to implement organic waste recycling on site in the case that more than eight cubic yards of organic waste per week are generated (City of Colton 2024).
- Consistent with CAP Measures Water-1 and Water-3, all Proposed Project landscaping shall be low irrigation and water use-efficient and water efficient appliances should be prioritized and utilized where possible.

*Timing/Implementation:*                      *Prior to the issuance of occupancy permits*

*Monitoring/Enforcement:*                *The City of Colton Planning Division*

*Regional Transportation Plan/Sustainable Communities Strategy*

Additionally, the objective of the Proposed Project also aligns with various aspects of the SCAG's RTP/SCS to accommodate balancing job opportunities in local areas to reduce long commutes from home to work.

In April 2024, the SCAG Regional Council adopted the 2024-2050 RTP/SCS, which charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2024 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

The Proposed Project Site is currently vacant and mixed-use development is proposed to accommodate a medical facility and hotel in close proximity (approximately 0.3 roadway miles) to a commercial area consisting of one grocery store, several restaurants, and residences. Located in an urbanized area of Colton, the site is surrounded by predominantly residential, commercial, retail, medical and restaurant land uses. This strategic positioning highlights the Project's "location efficiency." Location efficiency refers to how well a project is integrated within its urban context, such as an "urban area," "compact infill," or "suburban center." The Project Area qualifies as an urban/compact infill site, surrounded by existing residential, office and commercial developments in an active urban center. The Proposed Project would provide future visitors with a variety of nearby commercial uses as well as potential work opportunities within walking distance to nearby existing residences. Additionally, the Project's location along the OmniTrans Route 1 bus route would enhance connectivity. With a bus stop at the Arrowhead Regional Medical Center, Route 1 meanders through Colton on Meridian Avenue, E Valley Boulevard and Mt. Vernon Avenue before entering the City of San Bernardino and continuing to traverse W 2<sup>nd</sup> Street, with access offered to the Downtown San Bernardino Metrolink Station. After connecting with this Metrolink station, Route 1 continues through the City of San Bernardino. OmniTrans Route 1 makes it a viable alternative transportation option for future Project visitors, especially considering its connection to the Downtown San Bernardino Metrolink Station. This improved accessibility supports community integration by linking the Project Site with a broader network of commercial and residential areas. The increased use of public transit is anticipated to result in fewer vehicle trips and a reduction in VMT. Consequently, this shift can lead to a significant decrease in transportation related GHG emissions.

As such, the Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.



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## **LIST OF ATTACHMENTS**

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Attachment A – CalEEMod Output File for Air Quality Emissions and Greenhouse Gas Emissions

CalEEMod Output File for Air Quality Emissions and Greenhouse Gas Emissions

# Pepper Development Detailed Report

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6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Pepper Development
Construction Start Date	3/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	14.2
Location	1501 Violet St, Colton, CA 92324, USA
County	San Bernardino-South Coast
City	Colton
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5335
EDFZ	10
Electric Utility	Colton Electric Utility Department
Gas Utility	Southern California Gas
App Version	2022.1.1.28

## 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
Medical Office Building	60.0	1000sqft	0.46	60,000	0.69	—	—	—

Hotel	112	Room	0.33	71,000	0.69	—	—	—
Enclosed Parking with Elevator	203	Space	0.62	81,200	0.00	—	—	—
Parking Lot	118	Space	1.06	0.00	0.00	—	—	—
Recreational Swimming Pool	1.50	1000sqft	0.03	1,500	0.00	—	—	—
Other Non-Asphalt Surfaces	1.39	Acre	1.39	0.00	0.00	—	—	—

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

Sector	#	Measure Title
Transportation	T-2	Increase Job Density
Transportation	T-3	Provide Transit-Oriented Development

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.04	33.8	33.1	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,271	7,271	0.41	0.33	9.34	7,385
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.01	33.9	32.4	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,251	7,251	0.41	0.33	0.24	7,361
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.11	10.8	16.5	0.02	0.42	1.12	1.54	0.39	0.31	0.70	—	3,482	3,482	0.17	0.14	2.09	3,529

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	1.97	3.02	< 0.005	0.08	0.20	0.28	0.07	0.06	0.13	—	576	576	0.03	0.02	0.35	584

## 2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.04	33.8	33.1	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,271	7,271	0.41	0.33	9.34	7,385
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.01	33.9	32.4	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,251	7,251	0.41	0.33	0.24	7,361
2026	7.87	18.7	30.1	0.05	0.68	1.87	2.55	0.62	0.45	1.08	—	6,469	6,469	0.26	0.25	0.22	6,552
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.11	10.8	16.5	0.02	0.42	1.12	1.54	0.39	0.31	0.70	—	3,482	3,482	0.17	0.14	2.09	3,529
2026	1.02	2.42	3.93	0.01	0.09	0.24	0.33	0.08	0.06	0.14	—	838	838	0.03	0.03	0.47	849
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.75	1.97	3.02	< 0.005	0.08	0.20	0.28	0.07	0.06	0.13	—	576	576	0.03	0.02	0.35	584
2026	0.19	0.44	0.72	< 0.005	0.02	0.04	0.06	0.01	0.01	0.03	—	139	139	0.01	0.01	0.08	141

## 2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.04	33.8	33.1	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,271	7,271	0.41	0.33	9.34	7,385

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.01	33.9	32.4	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,251	7,251	0.41	0.33	0.24	7,361
2026	7.87	18.7	30.1	0.05	0.68	1.87	2.55	0.62	0.45	1.08	—	6,469	6,469	0.26	0.25	0.22	6,552
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.11	10.8	16.5	0.02	0.42	1.12	1.54	0.39	0.31	0.70	—	3,482	3,482	0.17	0.14	2.09	3,529
2026	1.02	2.42	3.93	0.01	0.09	0.24	0.33	0.08	0.06	0.14	—	838	838	0.03	0.03	0.47	849
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.75	1.97	3.02	< 0.005	0.08	0.20	0.28	0.07	0.06	0.13	—	576	576	0.03	0.02	0.35	584
2026	0.19	0.44	0.72	< 0.005	0.02	0.04	0.06	0.01	0.01	0.03	—	139	139	0.01	0.01	0.08	141

## 2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.1	10.8	105	0.25	0.25	21.6	21.9	0.24	5.49	5.73	407	29,465	29,872	42.2	1.19	190	31,471
Mit.	14.4	10.1	97.8	0.23	0.24	20.0	20.3	0.23	5.08	5.31	407	27,600	28,007	42.1	1.11	184	29,574
% Reduced	5%	7%	7%	7%	5%	7%	7%	5%	7%	7%	—	6%	6%	< 0.5%	7%	3%	6%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.9	11.5	79.9	0.23	0.24	21.6	21.9	0.23	5.49	5.72	407	27,871	28,278	42.2	1.23	115	29,813
Mit.	12.2	10.7	74.0	0.22	0.22	20.0	20.2	0.22	5.08	5.30	407	26,123	26,530	42.1	1.14	114	28,037
% Reduced	6%	7%	7%	7%	5%	7%	7%	5%	7%	7%	—	6%	6%	< 0.5%	7%	< 0.5%	6%

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.0	9.61	73.2	0.19	0.22	17.3	17.5	0.21	4.38	4.59	407	23,536	23,943	42.0	1.01	139	25,434
Mit.	11.4	8.98	68.3	0.18	0.21	16.0	16.2	0.20	4.06	4.26	407	22,126	22,533	41.9	0.94	137	23,999
% Reduced	5%	7%	7%	7%	4%	7%	7%	4%	7%	7%	—	6%	6%	< 0.5%	7%	1%	6%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.19	1.75	13.4	0.03	0.04	3.15	3.19	0.04	0.80	0.84	67.4	3,897	3,964	6.95	0.17	23.1	4,211
Mit.	2.09	1.64	12.5	0.03	0.04	2.92	2.96	0.04	0.74	0.78	67.4	3,663	3,731	6.94	0.16	22.8	3,973
% Reduced	5%	7%	7%	7%	4%	7%	7%	4%	7%	7%	—	6%	6%	< 0.5%	7%	1%	6%

## 2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.4	9.72	94.7	0.24	0.16	21.6	21.8	0.15	5.49	5.64	—	24,963	24,963	1.09	1.11	77.4	25,399
Area	4.67	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	15.1	10.8	105	0.25	0.25	21.6	21.9	0.24	5.49	5.73	407	29,465	29,872	42.2	1.19	190	31,471
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.72	10.4	79.1	0.23	0.16	21.6	21.8	0.15	5.49	5.64	—	23,407	23,407	1.13	1.15	2.01	23,779

Area	3.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	12.9	11.5	79.9	0.23	0.24	21.6	21.9	0.23	5.49	5.72	407	27,871	28,278	42.2	1.23	115	29,813
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.77	8.55	66.1	0.19	0.13	17.3	17.4	0.12	4.38	4.51	—	19,047	19,047	0.91	0.93	26.9	19,374
Area	4.20	0.05	6.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	12.0	9.61	73.2	0.19	0.22	17.3	17.5	0.21	4.38	4.59	407	23,536	23,943	42.0	1.01	139	25,434
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.42	1.56	12.1	0.03	0.02	3.15	3.17	0.02	0.80	0.82	—	3,153	3,153	0.15	0.15	4.46	3,208
Area	0.77	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32
Energy	0.01	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	724	724	0.06	0.01	—	727
Water	—	—	—	—	—	—	—	—	—	—	3.32	14.6	18.0	0.34	0.01	—	28.9
Waste	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.40	0.00	—	224
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6
Total	2.19	1.75	13.4	0.03	0.04	3.15	3.19	0.04	0.80	0.84	67.4	3,897	3,964	6.95	0.17	23.1	4,211

## 2.6. Operations Emissions by Sector, Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.64	9.00	87.7	0.22	0.15	20.0	20.2	0.14	5.08	5.22	—	23,099	23,099	1.01	1.03	71.6	23,502
Area	4.67	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	14.4	10.1	97.8	0.23	0.24	20.0	20.3	0.23	5.08	5.31	407	27,600	28,007	42.1	1.11	184	29,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.00	9.66	73.2	0.21	0.15	20.0	20.2	0.14	5.08	5.22	—	21,659	21,659	1.04	1.06	1.86	22,003
Area	3.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	12.2	10.7	74.0	0.22	0.22	20.0	20.2	0.22	5.08	5.30	407	26,123	26,530	42.1	1.14	114	28,037
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.19	7.91	61.2	0.17	0.12	16.0	16.1	0.11	4.06	4.17	—	17,636	17,636	0.84	0.86	24.9	17,939
Area	4.20	0.05	6.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	11.4	8.98	68.3	0.18	0.21	16.0	16.2	0.20	4.06	4.26	407	22,126	22,533	41.9	0.94	137	23,999
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	1.31	1.44	11.2	0.03	0.02	2.92	2.94	0.02	0.74	0.76	—	2,920	2,920	0.14	0.14	4.13	2,970
Area	0.77	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32
Energy	0.01	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	724	724	0.06	0.01	—	727
Water	—	—	—	—	—	—	—	—	—	—	3.32	14.6	18.0	0.34	0.01	—	28.9
Waste	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.40	0.00	—	224
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6
Total	2.09	1.64	12.5	0.03	0.04	2.92	2.96	0.04	0.74	0.78	67.4	3,663	3,731	6.94	0.16	22.8	3,973

### 3. Construction Emissions Details

#### 3.1. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.43	0.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	1.36	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	247	247	0.01	0.01	0.91	250
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
Hauling	0.04	2.07	1.16	0.01	0.02	0.46	0.49	0.02	0.13	0.15	—	1,729	1,729	0.18	0.28	3.67	1,821
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.08	0.08	1.03	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	226	226	0.01	0.01	0.02	229
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
Hauling	0.04	2.16	1.17	0.01	0.02	0.46	0.49	0.02	0.13	0.15	—	1,729	1,729	0.18	0.28	0.10	1,818
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.14	3.14	< 0.005	< 0.005	0.01	3.19
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
Hauling	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.53
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
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.92	3.92	< 0.005	< 0.005	< 0.005	4.13

### 3.2. Site Preparation (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.43	0.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	1.36	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	247	247	0.01	0.01	0.91	250
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
Hauling	0.04	2.07	1.16	0.01	0.02	0.46	0.49	0.02	0.13	0.15	—	1,729	1,729	0.18	0.28	3.67	1,821

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	1.03	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	226	226	0.01	0.01	0.02	229
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
Hauling	0.04	2.16	1.17	0.01	0.02	0.46	0.49	0.02	0.13	0.15	—	1,729	1,729	0.18	0.28	0.10	1,818
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.14	3.14	< 0.005	< 0.005	0.01	3.19
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
Hauling	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.53
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
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.92	3.92	< 0.005	< 0.005	< 0.005	4.13

### 3.3. Grading (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	64.9	64.9	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	0.78	215
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
Hauling	0.02	1.29	0.73	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,080	1,080	0.11	0.18	2.30	1,138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.31	4.31	< 0.005	< 0.005	0.01	4.37

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
Hauling	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
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
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.92	3.92	< 0.005	< 0.005	< 0.005	4.13

### 3.4. Grading (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	64.9	64.9	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	0.78	215
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
Hauling	0.02	1.29	0.73	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,080	1,080	0.11	0.18	2.30	1,138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.31	4.31	< 0.005	< 0.005	0.01	4.37
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
Hauling	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
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
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.92	3.92	< 0.005	< 0.005	< 0.005	4.13

### 3.5. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	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	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	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	0.57	5.25	6.56	0.01	0.22	—	0.22	0.20	—	0.20	—	1,206	1,206	0.05	0.01	—	1,210
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.96	1.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	200	200	0.01	< 0.005	—	200
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.37	6.52	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,180	1,180	0.05	0.04	4.38	1,198
Vendor	0.03	1.20	0.65	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,081	1,081	0.08	0.16	3.04	1,134

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.41	4.92	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,082	1,082	0.05	0.04	0.11	1,096
Vendor	0.03	1.25	0.65	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,081	1,081	0.08	0.16	0.08	1,132
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.22	2.61	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	552	552	0.03	0.02	0.95	560
Vendor	0.01	0.63	0.32	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	0.04	0.08	0.66	570
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.4	91.4	< 0.005	< 0.005	0.16	92.7
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	90.0	90.0	0.01	0.01	0.11	94.3
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

### 3.6. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	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	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	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	0.57	5.25	6.56	0.01	0.22	—	0.22	0.20	—	0.20	—	1,206	1,206	0.05	0.01	—	1,210
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.96	1.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	200	200	0.01	< 0.005	—	200
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.37	6.52	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,180	1,180	0.05	0.04	4.38	1,198
Vendor	0.03	1.20	0.65	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,081	1,081	0.08	0.16	3.04	1,134
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.41	4.92	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,082	1,082	0.05	0.04	0.11	1,096
Vendor	0.03	1.25	0.65	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,081	1,081	0.08	0.16	0.08	1,132
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.22	2.61	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	552	552	0.03	0.02	0.95	560
Vendor	0.01	0.63	0.32	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	0.04	0.08	0.66	570
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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.4	91.4	< 0.005	< 0.005	0.16	92.7
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	90.0	90.0	0.01	0.01	0.11	94.3
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

### 3.7. Building Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.27	1.67	< 0.005	0.05	—	0.05	0.04	—	0.04	—	310	310	0.01	< 0.005	—	311
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.37	4.55	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,060	1,060	0.02	0.04	0.10	1,073
Vendor	0.02	1.19	0.63	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,063	1,063	0.08	0.16	0.07	1,114
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	139	139	< 0.005	0.01	0.22	141
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	137	137	0.01	0.02	0.16	144
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.0	23.0	< 0.005	< 0.005	0.04	23.3
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.7	22.7	< 0.005	< 0.005	0.03	23.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.8. Building Construction (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.27	1.67	< 0.005	0.05	—	0.05	0.04	—	0.04	—	310	310	0.01	< 0.005	—	311
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.37	4.55	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,060	1,060	0.02	0.04	0.10	1,073
Vendor	0.02	1.19	0.63	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,063	1,063	0.08	0.16	0.07	1,114
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	139	139	< 0.005	0.01	0.22	141
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	137	137	0.01	0.02	0.16	144
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.0	23.0	< 0.005	< 0.005	0.04	23.3
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.7	22.7	< 0.005	< 0.005	0.03	23.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.9. Paving (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.28	4.45	0.01	0.14	—	0.14	0.13	—	0.13	—	679	679	0.03	0.01	—	682
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.60	0.81	< 0.005	0.03	—	0.03	0.02	—	0.02	—	112	112	< 0.005	< 0.005	—	113
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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	1.56	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	282	282	0.01	0.01	1.05	286
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.10	1.17	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	262
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	0.01	< 0.005	0.23	134
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.8	21.8	< 0.005	< 0.005	0.04	22.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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

### 3.10. Paving (2025) - Mitigated

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

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

Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.28	4.45	0.01	0.14	—	0.14	0.13	—	0.13	—	679	679	0.03	0.01	—	682
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.60	0.81	< 0.005	0.03	—	0.03	0.02	—	0.02	—	112	112	< 0.005	< 0.005	—	113
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	1.56	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	282	282	0.01	0.01	1.05	286
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
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.10	1.17	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	262
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	0.01	< 0.005	0.23	134
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.8	21.8	< 0.005	< 0.005	0.04	22.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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

### 3.11. Paving (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355
Paving	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.81	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	174	174	0.01	< 0.005	—	175
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.9	28.9	< 0.005	< 0.005	—	29.0
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.09	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.02	256
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.05	33.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.56
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
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

### 3.12. Paving (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355
Paving	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.81	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	174	174	0.01	< 0.005	—	175
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.9	28.9	< 0.005	< 0.005	—	29.0
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.09	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.02	256
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.05	33.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.56
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
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

### 3.13. Architectural Coating (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.44	0.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	67.2	67.2	< 0.005	< 0.005	—	67.4
Architectural Coatings	2.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.1	11.1	< 0.005	< 0.005	—	11.2
Architectural Coatings	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.30	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	236	236	0.01	0.01	0.88	240
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
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.98	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	216	216	0.01	0.01	0.02	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.52	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	110	110	0.01	< 0.005	0.19	112
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.03	18.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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

### 3.14. Architectural Coating (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.44	0.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	67.2	67.2	< 0.005	< 0.005	—	67.4
Architectural Coatings	2.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.1	11.1	< 0.005	< 0.005	—	11.2
Architectural Coatings	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.30	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	236	236	0.01	0.01	0.88	240
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
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.98	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	216	216	0.01	0.01	0.02	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.52	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	110	110	0.01	< 0.005	0.19	112
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.03	18.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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

### 3.15. Architectural Coating (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.02	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.2	17.2	< 0.005	< 0.005	—	17.3	
Architectural Coatings	0.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.85	2.85	< 0.005	< 0.005	—	2.86	
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.07	0.91	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	212	212	< 0.005	0.01	0.02	215	
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	
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	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.8	27.8	< 0.005	< 0.005	0.04	28.1	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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	

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.60	4.60	< 0.005	< 0.005	0.01	4.66
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
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

### 3.16. Architectural Coating (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.2	17.2	< 0.005	< 0.005	—	17.3
Architectural Coatings	0.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.85	2.85	< 0.005	< 0.005	—	2.86
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.91	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	212	212	< 0.005	0.01	0.02	215
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.8	27.8	< 0.005	< 0.005	0.04	28.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.60	4.60	< 0.005	< 0.005	0.01	4.66
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
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

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	7.09	6.62	64.5	0.17	0.11	14.7	14.8	0.10	3.74	3.84	—	17,003	17,003	0.74	0.76	52.7	17,300
Hotel	3.32	3.10	30.2	0.08	0.05	6.90	6.95	0.05	1.75	1.80	—	7,960	7,960	0.35	0.35	24.7	8,099
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	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	10.4	9.72	94.7	0.24	0.16	21.6	21.8	0.15	5.49	5.64	—	24,963	24,963	1.09	1.11	77.4	25,399
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	6.62	7.11	53.9	0.16	0.11	14.7	14.8	0.10	3.74	3.84	—	15,943	15,943	0.77	0.78	1.37	16,197
Hotel	3.10	3.33	25.2	0.07	0.05	6.90	6.95	0.05	1.75	1.80	—	7,464	7,464	0.36	0.37	0.64	7,582
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	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	9.72	10.4	79.1	0.23	0.16	21.6	21.8	0.15	5.49	5.64	—	23,407	23,407	1.13	1.15	2.01	23,779
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.86	0.94	7.28	0.02	0.01	1.90	1.92	0.01	0.48	0.50	—	1,905	1,905	0.09	0.09	2.69	1,938
Hotel	0.56	0.62	4.77	0.01	0.01	1.25	1.26	0.01	0.32	0.33	—	1,248	1,248	0.06	0.06	1.76	1,270
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.42	1.56	12.1	0.03	0.02	3.15	3.17	0.02	0.80	0.82	—	3,153	3,153	0.15	0.15	4.46	3,208

#### 4.1.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	6.54	6.11	59.6	0.15	0.10	13.6	13.7	0.09	3.45	3.55	—	15,690	15,690	0.68	0.70	48.7	15,964
Hotel	3.09	2.89	28.1	0.07	0.05	6.42	6.47	0.04	1.63	1.67	—	7,409	7,409	0.32	0.33	23.0	7,539
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	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	9.64	9.00	87.7	0.22	0.15	20.0	20.2	0.14	5.08	5.22	—	23,099	23,099	1.01	1.03	71.6	23,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	6.11	6.56	49.7	0.14	0.10	13.6	13.7	0.09	3.45	3.55	—	14,712	14,712	0.71	0.72	1.26	14,946
Hotel	2.89	3.10	23.5	0.07	0.05	6.42	6.47	0.04	1.63	1.67	—	6,947	6,947	0.33	0.34	0.60	7,058
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	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

Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>9.00</b>	<b>9.66</b>	<b>73.2</b>	<b>0.21</b>	<b>0.15</b>	<b>20.0</b>	<b>20.2</b>	<b>0.14</b>	<b>5.08</b>	<b>5.22</b>	<b>—</b>	<b>21,659</b>	<b>21,659</b>	<b>1.04</b>	<b>1.06</b>	<b>1.86</b>	<b>22,003</b>
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.79	0.87	6.72	0.02	0.01	1.76	1.77	0.01	0.45	0.46	—	1,758	1,758	0.08	0.09	2.48	1,788
Hotel	0.52	0.57	4.44	0.01	0.01	1.16	1.17	0.01	0.29	0.30	—	1,162	1,162	0.06	0.06	1.64	1,182
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>1.31</b>	<b>1.44</b>	<b>11.2</b>	<b>0.03</b>	<b>0.02</b>	<b>2.92</b>	<b>2.94</b>	<b>0.02</b>	<b>0.74</b>	<b>0.76</b>	<b>—</b>	<b>2,920</b>	<b>2,920</b>	<b>0.14</b>	<b>0.14</b>	<b>4.13</b>	<b>2,970</b>

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1,300	1,300	0.09	0.01	—	1,306
Hotel	—	—	—	—	—	—	—	—	—	—	—	1,407	1,407	0.10	0.01	—	1,413
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	372	372	0.03	< 0.005	—	374
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	50.3	50.3	< 0.005	< 0.005	—	50.5
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	38.6	38.6	< 0.005	< 0.005	—	38.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,168	3,168	0.23	0.03	—	3,182
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1,300	1,300	0.09	0.01	—	1,306
Hotel	—	—	—	—	—	—	—	—	—	—	—	1,407	1,407	0.10	0.01	—	1,413
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	372	372	0.03	< 0.005	—	374
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	50.3	50.3	< 0.005	< 0.005	—	50.5

Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	38.6	38.6	< 0.005	< 0.005	—	38.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,168	3,168	0.23	0.03	—	3,182
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	215	215	0.02	< 0.005	—	216
Hotel	—	—	—	—	—	—	—	—	—	—	—	233	233	0.02	< 0.005	—	234
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	61.6	61.6	< 0.005	< 0.005	—	61.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	8.33	8.33	< 0.005	< 0.005	—	8.37
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	6.39	6.39	< 0.005	< 0.005	—	6.42
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	525	525	0.04	< 0.005	—	527

4.2.2. Electricity Emissions By Land Use - Mitigated

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

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

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1,300	1,300	0.09	0.01	—	1,306
Hotel	—	—	—	—	—	—	—	—	—	—	—	1,407	1,407	0.10	0.01	—	1,413
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	372	372	0.03	< 0.005	—	374
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	50.3	50.3	< 0.005	< 0.005	—	50.5
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	38.6	38.6	< 0.005	< 0.005	—	38.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,168	3,168	0.23	0.03	—	3,182
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1,300	1,300	0.09	0.01	—	1,306
Hotel	—	—	—	—	—	—	—	—	—	—	—	1,407	1,407	0.10	0.01	—	1,413
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	372	372	0.03	< 0.005	—	374
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	50.3	50.3	< 0.005	< 0.005	—	50.5
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	38.6	38.6	< 0.005	< 0.005	—	38.8

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,168	3,168	0.23	0.03	—	3,182
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	215	215	0.02	< 0.005	—	216
Hotel	—	—	—	—	—	—	—	—	—	—	—	233	233	0.02	< 0.005	—	234
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	61.6	61.6	< 0.005	< 0.005	—	61.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	8.33	8.33	< 0.005	< 0.005	—	8.37
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	6.39	6.39	< 0.005	< 0.005	—	6.42
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	525	525	0.04	< 0.005	—	527

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	528	528	0.05	< 0.005	—	529

Hotel	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	680	680	0.06	< 0.005	—	682
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	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	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	528	528	0.05	< 0.005	—	529
Hotel	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	680	680	0.06	< 0.005	—	682
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	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	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.4	87.4	0.01	< 0.005	—	87.6
Hotel	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	113	113	0.01	< 0.005	—	113
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	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	0.01	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	200	200	0.02	< 0.005	—	200

#### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	528	528	0.05	< 0.005	—	529
Hotel	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	680	680	0.06	< 0.005	—	682

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	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	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	528	528	0.05	< 0.005	—	529
Hotel	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	680	680	0.06	< 0.005	—	682
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	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	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.4	87.4	0.01	< 0.005	—	87.6
Hotel	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	113	113	0.01	< 0.005	—	113
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	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
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	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	0.01	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	200	200	0.02	< 0.005	—	200

### 4.3. Area Emissions by Source

#### 4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	1.52	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Total	4.67	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.19	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32
Total	0.77	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32

### 4.3.2. Mitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.52	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Total	4.67	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.19	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32
Total	0.77	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32

#### 4.4. Water Emissions by Land Use

##### 4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	14.4	63.6	78.1	1.48	0.04	—	126
Hotel	—	—	—	—	—	—	—	—	—	—	5.44	24.0	29.5	0.56	0.01	—	47.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.17	0.75	0.92	0.02	< 0.005	—	1.48
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	14.4	63.6	78.1	1.48	0.04	—	126
Hotel	—	—	—	—	—	—	—	—	—	—	5.44	24.0	29.5	0.56	0.01	—	47.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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

Recreati Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.17	0.75	0.92	0.02	< 0.005	—	1.48
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	2.39	10.5	12.9	0.25	0.01	—	20.8
Hotel	—	—	—	—	—	—	—	—	—	—	0.90	3.98	4.88	0.09	< 0.005	—	7.86
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreati onal Swimmin g Pool	—	—	—	—	—	—	—	—	—	—	0.03	0.12	0.15	< 0.005	< 0.005	—	0.25
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	3.32	14.6	18.0	0.34	0.01	—	28.9

4.4.2. Mitigated

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

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

Medical Office Building	—	—	—	—	—	—	—	—	—	—	14.4	63.6	78.1	1.48	0.04	—	126
Hotel	—	—	—	—	—	—	—	—	—	—	5.44	24.0	29.5	0.56	0.01	—	47.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.17	0.75	0.92	0.02	< 0.005	—	1.48
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	14.4	63.6	78.1	1.48	0.04	—	126
Hotel	—	—	—	—	—	—	—	—	—	—	5.44	24.0	29.5	0.56	0.01	—	47.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.17	0.75	0.92	0.02	< 0.005	—	1.48

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	2.39	10.5	12.9	0.25	0.01	—	20.8
Hotel	—	—	—	—	—	—	—	—	—	—	0.90	3.98	4.88	0.09	< 0.005	—	7.86
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.03	0.12	0.15	< 0.005	< 0.005	—	0.25
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	3.32	14.6	18.0	0.34	0.01	—	28.9

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

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

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

Medical Office Building	—	—	—	—	—	—	—	—	—	—	349	0.00	349	34.9	0.00	—	1,222
Hotel	—	—	—	—	—	—	—	—	—	—	33.0	0.00	33.0	3.30	0.00	—	116
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	4.61	0.00	4.61	0.46	0.00	—	16.1
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	349	0.00	349	34.9	0.00	—	1,222
Hotel	—	—	—	—	—	—	—	—	—	—	33.0	0.00	33.0	3.30	0.00	—	116
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	4.61	0.00	4.61	0.46	0.00	—	16.1

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	57.8	0.00	57.8	5.78	0.00	—	202
Hotel	—	—	—	—	—	—	—	—	—	—	5.47	0.00	5.47	0.55	0.00	—	19.1
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.76	0.00	0.76	0.08	0.00	—	2.67
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.40	0.00	—	224

4.5.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	349	0.00	349	34.9	0.00	—	1,222

Hotel	—	—	—	—	—	—	—	—	—	—	33.0	0.00	33.0	3.30	0.00	—	116
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	4.61	0.00	4.61	0.46	0.00	—	16.1
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	349	0.00	349	34.9	0.00	—	1,222
Hotel	—	—	—	—	—	—	—	—	—	—	33.0	0.00	33.0	3.30	0.00	—	116
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	4.61	0.00	4.61	0.46	0.00	—	16.1
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	57.8	0.00	57.8	5.78	0.00	—	202
Hotel	—	—	—	—	—	—	—	—	—	—	5.47	0.00	5.47	0.55	0.00	—	19.1
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	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
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.76	0.00	0.76	0.08	0.00	—	2.67
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.40	0.00	—	224

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.53	1.53
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111

Recreati Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.53	1.53
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111
Recreati onal Swimmin g Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.4	18.4
Recreati onal Swimmin g Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6

#### 4.6.2. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.53	1.53
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.53	1.53
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.4	18.4
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

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

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

### 4.7.2. Mitigated

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

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

### 4.8.2. Mitigated

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

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

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

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

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

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

### 4.9.2. Mitigated

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

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

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

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/30/2025	4/6/2025	5.00	5.00	—
Grading	Grading	4/7/2025	4/18/2025	5.00	8.00	—
Building Construction	Building Construction	4/19/2025	3/7/2026	5.00	230	—
Paving	Paving	4/19/2025	3/7/2026	5.00	230	—
Architectural Coating	Architectural Coating	4/19/2025	3/7/2026	5.00	230	—

### 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/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
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	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

## 5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
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	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	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	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	25.0	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	15.6	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	83.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	35.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	16.8	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

### 5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	25.0	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	15.6	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	83.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	35.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	16.8	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

## 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	197,718	65,635	8,025

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	1,000	7.50	0.00	—
Grading	1,000	—	8.00	0.00	—
Paving	0.00	0.00	0.00	0.00	3.07

### 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
Medical Office Building	0.00	0%
Hotel	0.00	0%
Enclosed Parking with Elevator	0.62	100%
Parking Lot	1.06	100%
Recreational Swimming Pool	0.00	0%
Other Non-Asphalt Surfaces	1.39	0%

## 5.8. Construction Electricity Consumption and Emissions Factors

### kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	453	0.03	< 0.005
2026	0.00	453	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
Medical Office Building	1,912	0.00	0.00	498,381	20,770	0.00	0.00	5,415,120
Hotel	895	895	895	326,631	9,723	9,723	9,723	3,548,983
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Medical Office Building	1,764	0.00	0.00	459,874	19,165	0.00	0.00	4,996,719
Hotel	833	833	833	304,036	9,051	9,051	9,051	3,303,476
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

#### 5.10.1.2. Mitigated

### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	197,718	65,635	8,025

### 5.10.3. Landscape Equipment

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

### 5.10.4. Landscape Equipment - Mitigated

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

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Medical Office Building	1,047,113	453	0.0330	0.0040	1,646,401
Hotel	1,132,979	453	0.0330	0.0040	2,120,805

Enclosed Parking with Elevator	299,744	453	0.0330	0.0040	0.00
Parking Lot	40,524	453	0.0330	0.0040	0.00
Recreational Swimming Pool	31,099	453	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	453	0.0330	0.0040	0.00

### 5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Medical Office Building	1,047,113	453	0.0330	0.0040	1,646,401
Hotel	1,132,979	453	0.0330	0.0040	2,120,805
Enclosed Parking with Elevator	299,744	453	0.0330	0.0040	0.00
Parking Lot	40,524	453	0.0330	0.0040	0.00
Recreational Swimming Pool	31,099	453	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	453	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)
Medical Office Building	7,528,832	11.1
Hotel	2,841,078	11.1
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	88,715	0.00
Other Non-Asphalt Surfaces	0.00	0.00

## 5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Medical Office Building	7,528,832	11.1
Hotel	2,841,078	11.1
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	88,715	0.00
Other Non-Asphalt Surfaces	0.00	0.00

## 5.13. Operational Waste Generation

## 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Medical Office Building	648	—
Hotel	61.3	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—
Recreational Swimming Pool	8.55	—
Other Non-Asphalt Surfaces	0.00	—

## 5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Medical Office Building	648	—
Hotel	61.3	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—
Recreational Swimming Pool	8.55	—

Other Non-Asphalt Surfaces	0.00	—
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## 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
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Recreational Swimming Pool	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

### 5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Recreational Swimming Pool	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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### 5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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### 5.16.2. Process Boilers

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

Equipment Type	Fuel Type
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### 5.18. Vegetation

#### 5.18.1. Land Use Change

##### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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##### 5.18.1.2. Mitigated

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

##### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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##### 5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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#### 5.18.2. Sequestration

##### 5.18.2.1. Unmitigated

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

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.1	annual days of extreme heat
Extreme Precipitation	4.85	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (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	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

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

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

### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

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

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

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

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	98.7
AQ-PM	80.6
AQ-DPM	82.9
Drinking Water	87.6
Lead Risk Housing	38.6
Pesticides	0.00
Toxic Releases	60.9
Traffic	89.5
Effect Indicators	—
CleanUp Sites	68.9
Groundwater	39.8
Haz Waste Facilities/Generators	70.1
Impaired Water Bodies	0.00
Solid Waste	54.8
Sensitive Population	—
Asthma	64.9
Cardio-vascular	70.7
Low Birth Weights	34.5
Socioeconomic Factor Indicators	—
Education	84.5
Housing	81.8
Linguistic	—
Poverty	85.7
Unemployment	99.3

## 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	13.96124727
Employed	11.51032978
Median HI	33.45309893
Education	—
Bachelor's or higher	17.04093417
High school enrollment	13.78159887
Preschool enrollment	11.18952906
Transportation	—
Auto Access	49.51879892
Active commuting	7.532400873
Social	—
2-parent households	22.55870653
Voting	14.97497754
Neighborhood	—
Alcohol availability	53.71487232
Park access	81.35506224
Retail density	42.73065572
Supermarket access	66.46990889
Tree canopy	11.03554472
Housing	—
Homeownership	64.54510458
Housing habitability	7.750545361
Low-inc homeowner severe housing cost burden	41.42178878
Low-inc renter severe housing cost burden	1.193378673
Uncrowded housing	13.49929424
Health Outcomes	—

Insured adults	20.30026947
Arthritis	14.1
Asthma ER Admissions	38.1
High Blood Pressure	23.8
Cancer (excluding skin)	36.4
Asthma	18.0
Coronary Heart Disease	7.5
Chronic Obstructive Pulmonary Disease	13.3
Diagnosed Diabetes	16.2
Life Expectancy at Birth	4.0
Cognitively Disabled	74.6
Physically Disabled	76.0
Heart Attack ER Admissions	32.5
Mental Health Not Good	24.7
Chronic Kidney Disease	10.6
Obesity	26.2
Pedestrian Injuries	19.6
Physical Health Not Good	19.0
Stroke	11.3
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	28.8
No Leisure Time for Physical Activity	23.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	37.8
Elderly	61.3

English Speaking	42.9
Foreign-born	53.1
Outdoor Workers	52.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	51.9
Traffic Density	80.2
Traffic Access	23.0
Other Indices	—
Hardship	88.6
Other Decision Support	—
2016 Voting	34.9

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	93.0
Healthy Places Index Score for Project Location (b)	9.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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	Lot acreage for medical office building was updated to match site plan. Lot acreage and building square footage for hotel were updated to match site plan. Lot acreage for the enclosed parking with elevator land use was updated to match site plan for the 3-story parking garage.
Construction: Construction Phases	Building construction, paving, and architectural coating assumed to occur simultaneously. Demolition was removed because the parcel is vacant.
Operations: Vehicle Data	Project trip generation from KOA Corporation.
Operations: Energy Use	Energy consumption for pool heating estimated based on average cost of heating outdoor pools with a heat pump in Southern California.