

MEMORANDUM

To: Cynthia Mancha, City of Brawley, Development Services - Planning Division

From: Zhe Chen, Michael Baker International

Date: April 22, 2025

Subject: Brawley Mixed Use Master Plan Project – Air Quality Assessment

PURPOSE

The purpose of this technical memorandum is to evaluate potential short- and long-term air quality impacts that would result from the construction and operation of the proposed Brawley Mixed Use Master Plan Project (project), located in the City of Brawley (City), California.

PROJECT LOCATION

The approximately 66-acre project site is located in the northern portion of the City of Brawley in south-central Imperial County (County), California; refer to Exhibit 1, Regional Vicinity Map. The Cities of Imperial and El Centro lie approximately 9 miles and 13 miles, respectively, to the southwest. The international United States/Mexico border is located approximately 22 miles to the south.

The project site is located south of (future) Legion Road, east of Brawley Avenue/State Highway 86, and north of Rockwood Canal; refer to Exhibit 2, Site Vicinity. The affected County Assessor Parcel Number is 048-440-001. The site currently supports agricultural use. Regional access to the project vicinity is provided via Interstate 8, located approximately 14 miles to the south.

PROJECT DESCRIPTION

The project proposes an amendment to the Brawley Gateway Specific Plan to subdivide the property and allow for future commercial and multi-family residential uses; refer to Exhibit 3, Site Plan. Specifically, the western portion of the project site (approximately 37 acres) would be subdivided into 11 pads for future commercial uses. Pads 1-8 would include commercial buildings ranging from approximately 3,200 square feet (SF) to approximately 15,600 SF and are intended to support strip retail plaza uses. Pads 1-8 would have a combined building square footage totaling approximately 65,500 SF. Pads 10-11 would have a combined building square footage totaling approximately 243,000 SF and would support larger retail shopping center uses. Additionally, Pad 9 is anticipated to support a commercial hotel with approximately 150 rooms and an estimated building square footage of approximately 122,905 SF. Onsite parking would be provided for the proposed uses in conformance with City Zoning Ordinance requirements. Specifically, the commercial component of the proposed project would provide a total of 1,890 standard surface parking spaces.

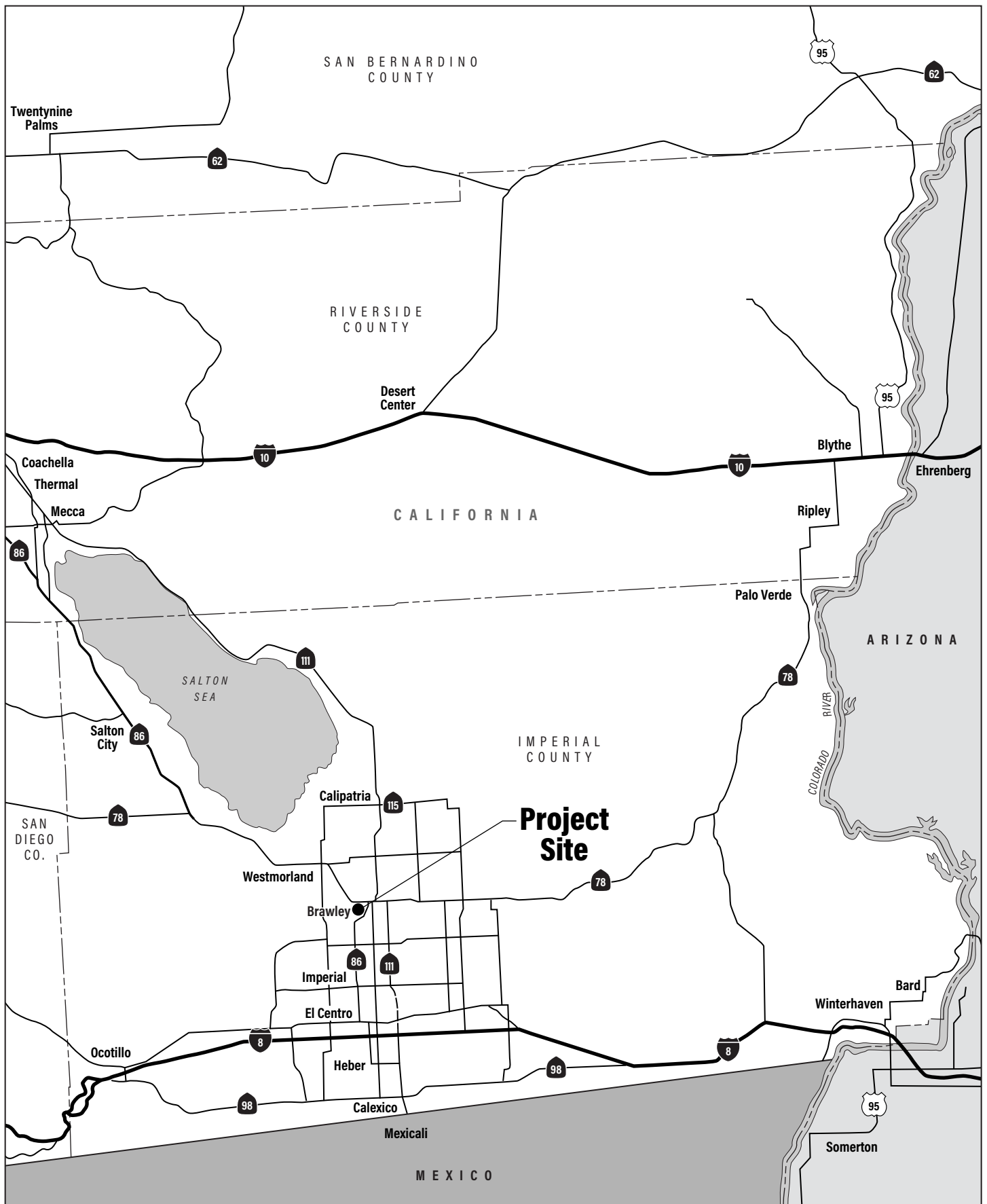
The eastern portion of the project site (approximately 29 acres) would be subdivided for the development of 408 multi-family residential units with varying floor plans. The residential component of the proposed project would provide a total of 836 parking spaces, including 216 attached garage spaces and 620 standard surface parking spaces. The residential area would offer community amenities including a dog park, clubhouse, pool, and fire pit as well as several community parks and green space for resident use and would provide opportunities for passive and active outdoor recreation.

Primary access to the commercial component of the proposed project would be provided via (future) Legion Road to the north; secondary access would be provided via a future/unnamed road to the south. Access from the north would require improvement of Legion Road to the centerline along the northern property boundary. The new access roadway along the southern boundary would be constructed above the existing canal (Rockwood Canal). Construction of this roadway would occur in coordination with the Imperial Irrigation District which owns and operates the canal.

Access to the proposed residential uses would be provided via(future) Legion Road to the north; secondary access would be provided via a future road along the eastern boundary of the project site.

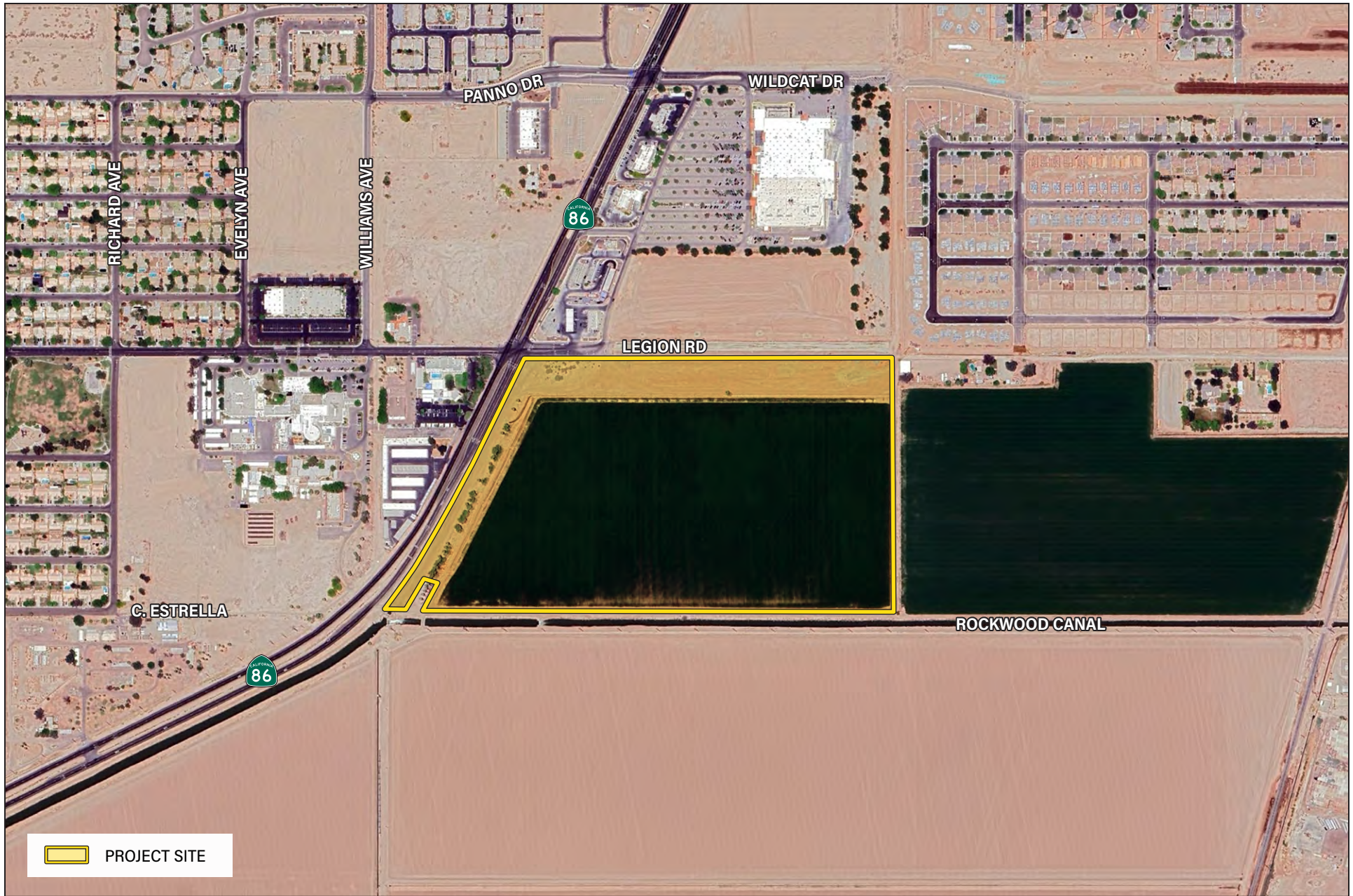
Operation of the proposed project would include the proposed 408 multi-family residential units on the eastern portion of the project site and future commercial uses on the western portion of the project site. The future commercial uses would operate consistent with the applicable zone, zoning regulations, and conform with allowed business hours. However, it should be noted that operating hours may vary depending on the specific use proposed (i.e., retail shopping center versus commercial hotel use). All parking demands generated by the residential and commercial components of the project would be accommodated on-site. The need for any off-site parking (i.e., street parking) would not be anticipated or proposed.

Construction activities would include grading, building construction, paving, and the application of architectural coatings. Construction activities would occur over approximately 33 months. The proposed earthwork would result in approximately 20,000 cubic yards of soil import.



BRAWLEY MIXED USE MASTER PLAN PROJECT - AIR QUALITY ASSESSMENT

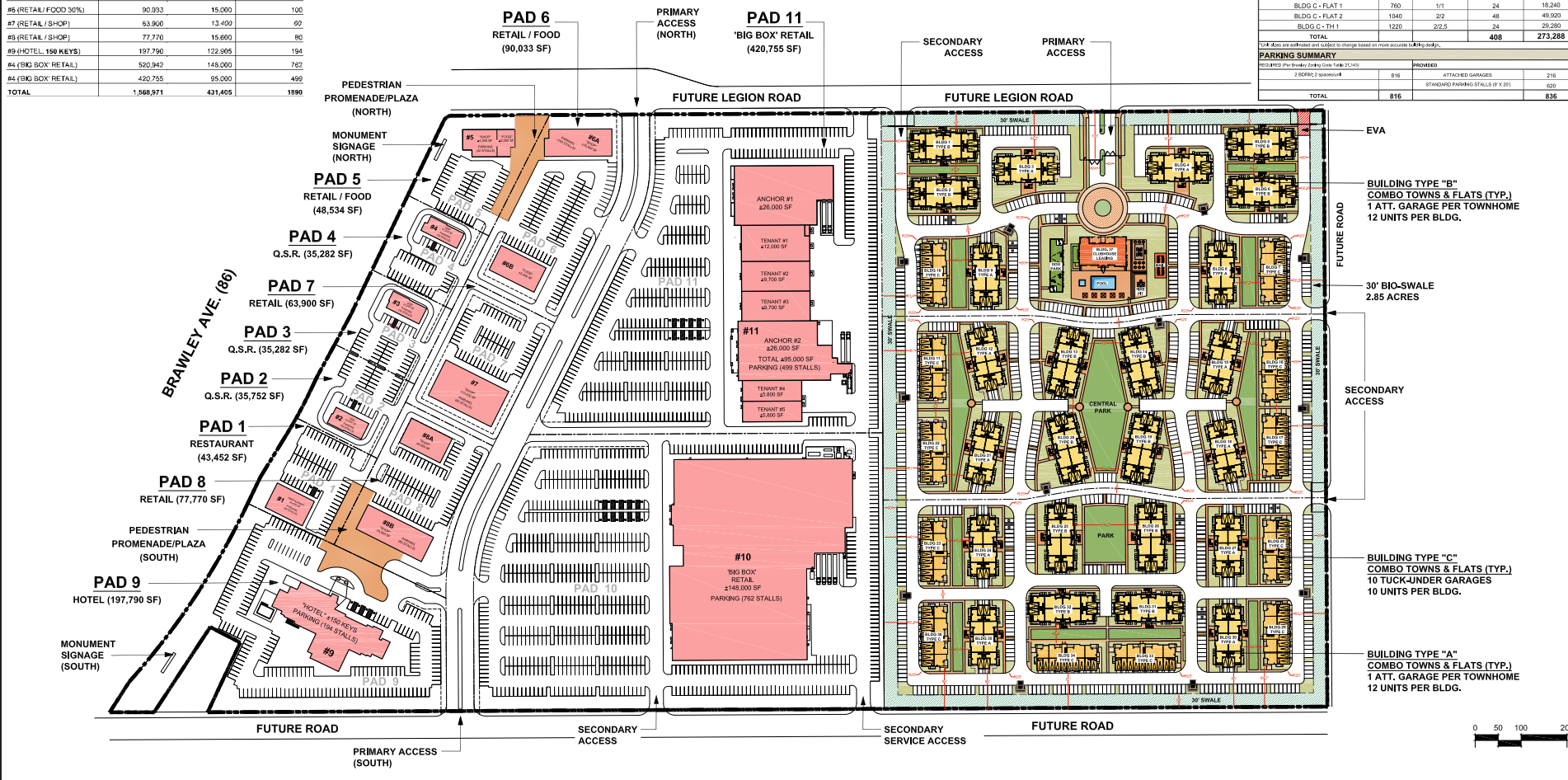




Source: Google Earth Pro, October 2024

SITE AREA		36 ACRES	
PAD SUMMARY			
PAD NUMBER	LOT SIZE (SF)	TOTAL BUILDING AREA (SF)	NO. OF PARKING PROVIDED
#1 (RESTAURANT)	43,452	5,400	50
#2 (Q.S.R.)	35,753	3,200	30
#3 (Q.S.R.)	34,760	3,200	30
#4 (Q.S.R.)	35,282	3,200	30
#5 (RETAIL / FOOD 30%)	48,534	6,500	40
#6 (RETAIL / FOOD 30%)	90,033	15,000	100
#7 (RETAIL / SHOP)	63,800	13,400	60
#8 (RETAIL / SHOP)	77,770	15,600	80
#9 (HOTEL - 150 KEYS)	197,790	122,905	190
#10 (BIG BOX RETAIL)	520,942	148,000	760
#11 (BIG BOX RETAIL)	420,755	95,000	490
TOTAL	1,588,971	331,405	1,880

SITE AREA	287.7 ACRES			
TOTAL UNITS	408 UNITS			
DENSITY	14.2 DU/AC			
APARTMENT UNIT SUMMARY				
	50.0%	30.0%	10.0%	100.0%
BLDG A - UNIT 1	760	1/1	48	36,480
BLDG A - UNIT 2	1953	2/2	48	50,544
BLDG A - UNIT 2B (TH)	1200	2/2.5	48	57,600
BLDG B - UNIT 3A	1953	2/2	96	101,568
BLDG B - UNIT 3B (TH)	1200	2/2.5	48	57,600
BLDG C - CARRIAGE 1	715	1/1	24	17,160
BLDG C - FLAT 1	760	1/1	24	18,240
BLDG C - FLAT 2	1940	2/2	48	49,920
BLDG C - TH 1	1200	2/2.5	24	29,280
TOTAL			408	273,288
NOTE: Areas are unaffiliated and subject to change based on more accurate 1/4" scale details.				
PARKING SUMMARY		PROPOSED		
Proposed by: Shawley Park (See Plan 14-01-001)				
2 BICR 2 spaces x 8	816	ATTACHED GARAGES		616
		STANDARD PARKING STALLS (P X 20)		250



Michael Baker
INTERNATIONAL



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Site Plan

Exhibit 3

CRITERIA AIR POLLUTANTS

Air quality is a general description of how levels of air pollution and other atmospheric conditions can affect public health and the environment. Under the Federal Clean Air Act (FCAA), the U.S. Environmental Protection Agency (EPA) has identified six air pollutants that are environmentally prevalent and produced by human activities to be of concern with respect to health, the environment and welfare of the public. These specific pollutants, known as criteria air pollutants, are pollutants for which the federal and state governments have established ambient air quality standards—or criteria—for outdoor concentrations to protect public health. These pollutants are common byproducts of human activities and have been documented through scientific research to cause various adverse health effect outcomes. The federal ambient concentration criteria are known as the National Ambient Air Quality Standards (NAAQS), and the California ambient concentration criteria are referred to as the California Ambient Air Quality Standards (CAAQS). The criteria air pollutants regulated at the federal jurisdiction include carbon monoxide (CO), ground-level ozone (O₃), nitrogen dioxide (NO₂), respirable particulate matter ten microns or less in diameter (PM₁₀), fine particulate matter 2.5 microns or less in diameter (PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb).

Carbon Monoxide (CO). CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of CO.

Ozone (O₃). O₃ occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" O₃ layer) extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays. "Bad" O₃ is a photochemical pollutant, and needs volatile organic compounds (VOCs), nitrogen oxides (NO_x), and sunlight to form; therefore, VOCs and NO_x are O₃ precursors. To reduce O₃ concentrations, it is necessary to control the emissions of these O₃ precursors. Significant O₃ formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O₃ concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O₃ in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O₃ (in the troposphere) can adversely affect the human respiratory system and other tissues. O₃ is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O₃. Short-term exposure (lasting for a few hours) to O₃ at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO₂). NO_x are a family of highly reactive gases that are a primary precursor to the formation of ground-level O₃ and react in the atmosphere to form acid rain. NO₂ (often used

interchangeably with NO_x) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO₂ occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO₂ can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO₂ concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO₂ may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM₁₀). PM₁₀ refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM₁₀ arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM₁₀ scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, the California Air Resources Board (CARB) adopted amendments to the statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25). Exposure to PM₁₀ may result in particles being deposited on the lung surface, causing tissue damage, lung inflammation, and impacting respiratory and cardiovascular health.

Fine Particulate Matter (PM_{2.5}). Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal PM_{2.5} standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In February 2024, the EPA lowered the federal primary PM_{2.5} annual standard to 9.0 microgram per cubic meter (ug/m³) from the 12.0 ug/m³ standard set in 2012. The secondary annual standard remains at 15.0 ug/m³. States and Tribal Authorities have submitted initial recommendations of areas that do not attain this standard (i.e., nonattainment areas) to EPA for consideration; the EPA will finalize area designations by February 2026.

On June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.

Due to the size of PM_{2.5}, these particles are more likely to be inhaled and deposited in the deeper parts of the lungs. Short-term exposure (up to 24 hours) may result in chronic bronchitis, asthma attacks, respiratory symptoms, and premature mortality.

Sulfur Dioxide (SO₂). Sulfur dioxide (SO₂) is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with SO_x. Exposure of a few minutes to low levels of SO₂ can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O₃ to the same extent when exposed to photochemical processes. VOCs

often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOC is not considered a criteria pollutant; however, it is a precursor to O₃, which is a criteria pollutant. VOCs are a criteria pollutant since they are a precursor to O₃, which is a criteria pollutant. The terms VOC and ROG (see below) are used interchangeably. Exposure to VOC vapors may result in eyes, nose, and throat irritation, nausea, headaches, and damage to the liver, kidney, and central nervous system.

Reactive Organic Gases (ROG). Similar to VOCs, ROGs are also precursors in forming O₃ and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O₃, which is a criteria pollutant. The terms ROG and VOC are used interchangeably. Exposure to ROG may result in the same adverse health effects as VOCs.

EXISTING SETTING

Regional Topography

The CARB divides the State into 15 air basins that share similar meteorological and topographical features. The project site lies within the Salton Sea Air Basin (Basin). The Basin includes all of Imperial County and the middle part of Riverside County.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of air pollutants throughout the Basin.

Climate

The climate in the Basin is typical of a desert regime, with large daily and seasonal fluctuations in temperature and relatively high annual average temperatures. High temperatures frequently exceed 100 degrees Fahrenheit (°F) for the summer months. During the winter, temperatures can drop to near freezing (and below freezing at higher elevations).

Climatic conditions in the Basin are governed by the large-scale sinking and warming air in the subtropical high-pressure center of the Pacific Ocean. The high pressure ridge blocks most mid-latitude storms except in the winter when the high-pressure ridge is weakest and farther south. Similarly, the coastal mountains prevent the intrusion of any cool damp marine air from the coast. Because of the weakened storms and the mountainous barrier, the Basin has hot summers, mild winters, and little rainfall. The flat terrain of the Valley and the strong temperature differentials created by intense solar heating produces moderate winds and deep thermal convection.

The flat terrain and strong temperature differentials created by intense heating and cooling patterns produce moderate winds and deep thermal circulation systems. As a result, the general dispersion of local air pollution is greater than in the coastal basins where polluted inversion layers may remain for long periods of time.

The project area experiences average high temperatures of up to 107°F during the month of July, and average low temperatures of 43°F during the months of January and December. The area also experiences an average of up to approximately 0.8 inches of precipitation per month, with the most precipitation occurring in the month of February.¹

Local Ambient Air Quality

CARB monitors ambient air quality at approximately 250 air monitoring stations across the State. Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The closest air monitoring station to the project site that monitors O₃ and PM₁₀ is the Westmorland-W 1st Street Monitoring Station located at 202 W First Street, Westmorland CA, 92281. The closest air monitoring station to the project site that monitors NO₂ and PM_{2.5} is the El Centro-9th Street Monitoring Station located at 150 9th Street, El Centro CA, 92243. The closest air monitoring station to the project site that monitors CO is the Calexico-Ethel Street Monitoring Station located at 1085 Andrade Ave, Calexico CA, 92231. Local air quality data from 2022 to 2024 is provided in Table 1, Summary of Air Quality Data. Table 1 lists the monitored maximum concentrations and number of exceedances of federal/state air quality standards for each year.

Sensitive Receptors

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 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The nearest sensitive receptor to the project site is the existing church (Gateway Church of Brawley) located to the west, across Brawley Avenue/Highway 86, approximately 130 feet away when measured from the property line. It should be noted that a residential community comprised of single-family residences is currently being constructed approximately 75 feet northeast of the project site when measured from the property line. While these single-family residences have not been fully constructed, the residences are most likely to be constructed and occupied prior to the construction completion of the proposed project. As such, they are analyzed as the closest sensitive receptors as a conservative analysis.

¹ Weather Spark, *Average Weather in Brawley, California, United States*, <https://weatherspark.com/y/2199/Average-Weather-in-Brawley-California-United-States-Year-Round>, accessed April 9, 2025.

Table 1
Measured Air Quality Level

Pollutant	Primary Standard		Year	Maximum Concentration ¹	Number of Days State/Federal Std. Exceeded
	California	Federal			
Ozone (O ₃) ² (1-hour)	0.09 ppm for 1 hour	NA ⁷	2022 2023 2024	0.085 ppm 0.090 ppm 0.057 ppm	0/0 0/0 0/0
Ozone (O ₃) ² (8-hour)	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2022 2023 2024	0.068 ppm 0.084 ppm 0.072 ppm	0/0 7/6 */*
Carbon Monoxide (CO) ⁴ (1-hour)	20 ppm for 1 hour	35 ppm for 1 hour	2022 2023 2024	5.066 ppm * *	0/0 */* */*
Nitrogen Dioxide (NO ₂) ³	0.18 ppm for 1 hour	0.100 ppm for 1 hour	2022 2023 2024	0.051 ppm 0.051 ppm 0.023 ppm	0/0 0/0 0/0
Fine Particulate Matter (PM _{2.5}) ^{3, 5}	No Separate Standard	35 µg/m ³ for 24 hours	2022 2023 2024	30.6 µg/m ³ 42.0 µg/m ³ 23.6 µg/m ³	NA/0 NA/1 NA/0
Coarse Particulate Matter (PM ₁₀) ^{2, 5, 6}	50 µg/m ³ for 24 hours	150 µg/m ³ for 24 hours ⁸	2022 2023 2024	896.2 µg/m ³ 621.5 µg/m ³ *	123/19 82/14 */*
ppm = parts per million µg/m ³ = micrograms per cubic meter N/A = Not Applicable PM₁₀ = particulate matter 10 microns in diameter or less PM_{2.5} = particulate matter 2.5 microns in diameter or less * = Insufficient Data 					
Notes: 1. Maximum concentration is measured over the same period as the California Standards. 2. Data collected from the Westmorland-W 1st Street Monitoring Station located at 202 W First Street, Westmorland CA 92281. 3. Data collected from the El Centro-9th Street Monitoring Station located at 150 9th Street, El Centro CA 92243. 4. Data collected from the Calexico-Ethel Street Monitoring Station located at 1085 Andrade Ave, Calexico CA 92231. 5. PM ₁₀ and PM _{2.5} exceedances are derived from the number of samples exceeded, not days. 6. PM ₁₀ exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002. 7. The Federal standard for 1-hour ozone was revoked in June 2005. 8. The Federal standard for average PM ₁₀ was revoked in December 2006.					
Sources: California Air Resources Board, <i>ADAM Air Quality Data Statistics</i> , http://www.arb.ca.gov/adam/ , accessed April 10, 2025. California Air Resources Board, <i>AQMIS2: Air Quality Data</i> , https://www.arb.ca.gov/aqmis2/aqdselect.php , accessed April 10, 2025.					

REGULATORY SETTING

Federal

Federal Clean Air Act (FCAA)

The FCAA of 1970 and the FCAA Amendments of 1971 required the EPA to establish NAAQS, which required the EPA to adopt more stringent air quality standards or to include standards for other specific pollutants. The FCAA was amended in 1990 to address a large number of air pollutants that are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects. A total of 188 specific pollutants and chemical groups were initially identified as hazardous air pollutants, and the list has been modified over time. The FCAA Amendments included new regulatory programs to control acid deposition and regulate the issuance of stationary source operating permits. These standards identify levels of air quality for “criteria” pollutants that are considered the

maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare; refer to Table 2, *National and California Ambient Air Quality Standards*.

State

California Clean Air Act

Clean Air Act permitting in California is the shared responsibility of the CARB, its 35 air pollution control agencies (districts), and EPA Region 9. Generally, CARB plays an oversight role for permitting and does not issue any pre-construction or operating permits. However, the State agency provides significant support to agencies that need permitting assistance.

California Air Resource Board

CARB administers the air quality policy in California. The CAAQS were established in 1969 pursuant to the Mulford-Carrell Act. These standards, shown with the NAAQS in Table 2, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates. The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with the CAAQS. These AQMPs also serve as the basis for the preparation of the State Implementation Plan (SIP) for the State of California.

Like the EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data show that a State standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as nonattainment.

Regional

Imperial County Air Pollution Control District

The Imperial County Air Pollution Control District (ICAPCD) adopted the *Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard* (Ozone Plan) and the *Imperial County 2018 Redesignation Request and Maintenance Plan for Particulate Matter Less Than 10 Microns in Diameter* (PM₁₀ Plan), which established a program of rules and regulations directed at reducing air pollutant emissions and achieving State and Federal air quality standards. The Ozone Plan and PM₁₀ Plan incorporate the latest scientific and technical information and planning assumptions, including the latest growth assumptions from Southern California Association of Governments (SCAG) Connect SoCal: 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), and updated emission inventory methodologies for various source categories. SCAG updates the RTP/SCS every four years and the most recent plan, the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal 2024) was adopted on April 4, 2024. While SCAG recently adopted the Connect SoCal 2024, the ICAPCD has not released the updated Ozone Plan and PM₁₀ Plan.

Table 2
National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California ¹		Federal ²	
		Standard ³	Attainment Status	Standards ^{3,4}	Attainment Status
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Nonattainment	N/A	N/A ⁵
	8 Hours	0.070 ppm (137 µg/m ³)	Nonattainment	0.070 ppm (137 µg/m ³)	Nonattainment
Particulate Matter (PM ₁₀)	24 Hours	50 µg/m ³	Nonattainment	150 µg/m ³	Attainment/Maintenance
	Annual Arithmetic Mean	20 µg/m ³	Nonattainment	N/A	N/A
Fine Particulate Matter (PM _{2.5})	24 Hours	No Separate State Standard		35 µg/m ³	Nonattainment
	Annual Arithmetic Mean	12 µg/m ³	Nonattainment	9.0 µg/m ³	Nonattainment
Carbon Monoxide (CO)	8 Hours	9.0 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Attainment/Maintenance
	1 Hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Attainment/Maintenance
Nitrogen Dioxide (NO ₂) ⁵	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	N/A	53 ppb (100 µg/m ³)	Attainment/Maintenance
	1 Hour	0.18 ppm (339 µg/m ³)	Attainment	100 ppb (188 µg/m ³)	Attainment/Maintenance
Lead (Pb) ^{7,8}	30 days Average	1.5 µg/m ³	Attainment	N/A	N/A
	Calendar Quarter	N/A	N/A	1.5 µg/m ³	Nonattainment
	Rolling 3-Month Average	N/A	N/A	0.15 µg/m ³	Nonattainment
Sulfur Dioxide (SO ₂) ⁶	24 Hours	0.04 ppm (105 µg/m ³)	Attainment	0.14 ppm (for certain areas)	Unclassified/Attainment
	3 Hours	N/A	N/A	N/A	N/A
	1 Hour	0.25 ppm (655 µg/m ³)	Attainment	75 ppb (196 µg/m ³)	N/A
	Annual Arithmetic Mean	N/A	N/A	0.30 ppm (for certain areas)	Unclassified/Attainment
Visibility-Reducing Particles ⁹	8 Hours (10 a.m. to 6 p.m., PST)	Extinction coefficient = 0.23 km@<70% RH	Unclassified	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Unclassified		
Vinyl Chloride ⁷	24 Hour	0.01 ppm (26 µg/m ³)	N/A		

Notes: µg/m³ = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion; km = kilometer(s); RH = relative humidity; PST = Pacific Standard Time; N/A = Not Applicable

- California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equalled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
- Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: California Air Resources Board, *Ambient Air Quality Standards Chart*, https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf, July 16, 2024.

Southern California Association of Governments

On September 3, 2020, the Regional Council of SCAG formally adopted the 2020-2045 RTP/SCS. The SCS portion of the 2020-2045 RTP/SCS highlights strategies for the region to reach the regional target of

reducing greenhouse gases (GHGs) from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels). Specially, these strategies are:

- Focus growth near destinations and mobility options;
- Promote diverse housing choices;
- Leverage technology innovations;
- Support implementation of sustainability policies; and
- Promote a green region.

Furthermore, the 2020-2045 RTP/SCS discusses a variety of land use tools to help achieve the state-mandated reductions in GHG emissions through reduced per capita vehicle miles traveled (VMT). Some of these tools include center-focused placemaking, focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

The latest 2024-2050 RTP/SCS (Connect SoCal 2024) was adopted on April 4, 2024. Connect SoCal 2024 is a vision for the future of Southern California that includes policies, strategies, and projects to advance the region's mobility, economy, and sustainability through 2050. While SCAG recently adopted the Connect SoCal 2024, the ICAPCD has not released updated Ozone Plan and PM₁₀ Plan. As such, this memorandum is based on the 2022 AQMP and the RTP/SCS that was adopted at the time, the 2020-2045 RTP/SCS.

Air Pollutant Emissions Thresholds

The *ICAPCD CEQA Air Quality Handbook* provides significance thresholds for both construction and operation of projects within the ICAPCD's jurisdiction. If the ICAPCD thresholds are exceeded, a potentially significant impact could result. However, ultimately the lead agency determines the thresholds of significance for impacts. If a project proposes development in excess of the established thresholds, as outlined in Table 3, Imperial County Air Pollution Control District Emissions Thresholds, a significant air quality impact may occur, and additional analysis is warranted to fully assess the significance of impacts.

Table 3
Imperial County Air Pollution Control District Emissions Thresholds

Phase	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Construction	75	100	550	N/A	150	N/A
Operational	137	137	550	150	150	550
Notes: ROG = reactive organic gases; NO _x = nitrous oxides; CO = carbon monoxide; SO _x = sulfur oxides; PM ₁₀ = particulate matter 10 microns in diameter or less; PM _{2.5} = particulate matter 2.5 microns in diameter or less; N/A = Not Applicable						
Source: Imperial County Air Pollution Control District, <i>CEQA Air Quality Handbook</i> , December 12, 2017.						

Local Carbon Monoxide Standards

A project would result in a local air quality impact if the project results in increased traffic volumes and/or decreases in level of service (LOS) that would result in an exceedance of the CO ambient air quality standards of 20 parts per million (ppm) for 1-hour CO concentration levels, and 9 ppm for 8-hour CO concentration levels. If the CO concentrations at potentially impacted intersections with the project are lower than the standards, then there is no significant impact. If future CO concentrations with the project are above the standard, then the project would have a significant local air quality impact.

Local

City of Brawley

City of Brawley General Plan Update

The Resource Management Element (RME) of the *City of Brawley General Plan Update* (General Plan)² includes goal and policies related to air quality. The following goal, objectives, and policies are applicable to the proposed project:

RME Goal 1: Reduction of Air Pollution

RME Objective 1.1: Reduce air pollution through proper land use, transportation and energy use planning.

RME Policy 1.1.2: Design vehicular access to commercial land uses from arterial streets to improve vehicular ingress and egress.

RME Policy 1.1.3: Locate multiple family developments close to commercial areas to encourage pedestrian travel rather than vehicular travel.

RME Policy 1.1.4: Develop neighborhood parks and/or joint use facilities near future concentrations of residents to encourage pedestrian travel to the recreation facilities.

RME Policy 1.1.5: Provide commercial areas that are conducive to pedestrian and bicyclist circulation.

RME Policy 1.1.10: Encourage site plan designs to provide the appropriate set-backs and/or design features that reduce toxic air contaminants at the source.

RME Objective 1.2: Improve air quality by influencing transportation choices of mode, time of day, or whether to travel.

RME Policy 1.2.5: For planned high density and mixed use developments, project proponents should consult with the local transit agency and incorporate all appropriate and feasible transit amenities into the plans.

RME Policy 1.2.10: Integrate air quality planning with the land use and transportation process.

RME Objective 1.4: Reduce emissions through greater energy efficiency and conservation, and the use of renewable resources.

RME Policy 1.4.2: Encourage and promote all new developments to be constructed with energy efficient lighting, air conditioning, and heating systems.

² City of Brawley, *City of Brawley General Plan Update*, September 2008, https://www.brawley-ca.gov/assets/planning/long_range_planning/september-2008-brawley-general-plan.pdf, accessed April 9, 2025.

RME Policy 1.4.3: Encourage and promote all new developments to be designed structurally to maximize cooling efficiency and natural shade.

RME Policy 1.4.4: Encourage and promote all new developments to incorporate trees to maximize natural shade and air pollution control.

RME Policy 1.4.5: Consider all feasible alternatives to minimize emissions from diesel equipment (e.g., trucks, construction equipment, and generators).

RME Policy 1.4.11: Utilize all available renewable energy sources to reduce fuel consumption and demand on the power grid.

CALIFORNIA ENVIRONMENTAL QUALITY ACT THRESHOLDS

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines), project impacts are evaluated to determine whether significant adverse environmental impacts would occur. This analysis is focused on the project's potential impacts and identifies mitigation measures, if required, to reduce or avoid any potentially significant impacts that are identified. According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan (refer to Impact Statement AQ-1);
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable Federal or State ambient air quality standard (refer to Impact Statement AQ-2);
- Expose sensitive receptors to substantial pollutant concentrations (refer to Impact Statement AQ-3); and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (refer to Impact Statement AQ-4).

Methodology

Construction

Project construction would primarily generate temporary criteria pollutants from construction equipment operation on-site and construction worker vehicle trips to and from the project site, and from construction material deliveries to and from the project site. Construction input data for CalEEMod include, but are not limited to, (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; and (3) areas to be excavated and graded. Construction emissions were quantified by estimating the types and quantity of equipment that would be used on-site during each construction phase, as provided by the model defaults. CalEEMod also estimates off-site emissions from worker, vendor, and hauling truck trips.

Construction of the proposed project is anticipated to take approximately 33 months to complete. The construction activities would include grading, building construction, paving, and architectural coating. The number of worker and vendor trips were based on CalEEMod defaults, and the hauling truck trips were generally based on the soil import volume provided by the project applicant; approximately 20,000 cubic

yards of soil import is anticipated to be required for this project. The default trip lengths were used for worker, vendor, and hauling truck trips.

Operation

Operational sources of criteria pollutant emissions include area, energy, and mobile sources which are further discussed below. CalEEMod modeling was conducted for the proposed project condition.

Area Sources

Emissions associated with area sources include consumer products, landscape maintenance, and architectural coating. Area source emissions were calculated using standard emission rates from CARB, USEPA, ICAPCD, and CalEEMod model defaults.

Energy Sources

The project would be served by the Imperial Irrigation District (IID). The primary use of electricity by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, landscaping equipment, and electronics. However, emissions from electricity use are not included in the air quality analysis as they only apply to greenhouse gas emissions since electricity generation is an indirect emission generated off-site and, therefore, not relevant for local and regional air quality conditions. According to the project applicant, the project would not use natural gas on-site.

Mobile Sources

Mobile source emissions were estimated by multiplying the project's total VMT by the vehicle emission factors. The vehicle emission factors were CalEEMod default values for the Imperial County. The project-specific VMT were calculated from project trip generation rates and CalEEMod default trip lengths. It is estimated that the project would generate approximately 14,307 daily trips (Michael Baker 2025).

IMPACT ANALYSIS

AQ-1 WOULD THE PROJECT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN?

Level of Significance: Less Than Significant Impact.

The project is located within the Salton Sea Air Basin, which is governed by the ICAPCD. The ICAPCD adopted the Ozone Plan and the PM₁₀ Plan that establish a program of rules and regulations directed at reducing air pollutant emissions and achieving State and Federal air quality standards. The Ozone Plan and PM₁₀ Plan incorporate the latest scientific and technical information and planning assumptions, including the latest growth assumptions from SCAG 2020-2045 RTP/SCS, and updated emission inventory methodologies for various source categories. While SCAG has recently adopted Connect SoCal 2024, ICAPCD has not released updated Ozone Plan and PM₁₀ Plan. As such, this consistency analysis is based on the Ozone Plan and the PM₁₀ Plan and the RTP/SCS that was adopted at the time, the 2020-2045 RTP/SCS.

According to the ICAPCD CEQA Air Quality Handbook, project consistency with the Ozone Plan and PM₁₀ Plan can be determined by comparing the actual population growth in the County of Imperial (County) with the projected growth rates used in the Ozone Plan and PM₁₀ Plan. The projected growth rate in population is used as an indicator of future emissions from population-related emission categories in the Ozone Plan and PM₁₀ Plan. These emission estimates are used, in part, to project the date by which the County will attain the federal ozone and PM₁₀ standards.

The project site is zoned C-P Service and Professional, C-2 Medium Commercial, and M-1 Light Manufacturing by the Zoning Map³, and designated Light Industrial/Business Park and Commercial by the Land Use Map⁴. The proposed project would involve constructing 408 units of multi-family residential uses, a 150-room hotel (approximately 122,905 SF) and approximately 308,500 SF of retail commercial uses. As such, the project would require a General Plan Amendment and Zoning Change. With approval of the General Plan Amendment and Zoning Change, the project would be consistent with the General Plan and Zoning Map requirements.

The population estimate as of January 1, 2024, is 28,345 persons in the City of Brawley.⁵ The project would induce population growth directly through the construction of 408 residential units. Based on the CalEEMod default value of 3.56 persons per dwelling unit, the project would result in a direct population increase of approximately 1,452 persons. Based on the population forecast provided in the 2020-2045 RTP/SCS, the City is estimated to have approximately 41,100 residents by 2045 (the 2020-2045 RTP/SCS horizon year).⁶ Therefore, between 2024 and 2045, the City is expected to have an estimated population growth of 12,755 residents. The project's 1,452 residents would represent approximately 11.4 percent of the anticipated growth in the City. In addition, according to the project applicant, the project would require approximately 325 employees. Based on the employment forecast provided in the 2020-2045 RTP/SCS, the City was estimated to have approximately 8,000 employees in 2016, increasing to an estimated 13,600 employees by 2045.⁷ Therefore, between 2016 and 2045, the City is expected to have an estimated employment growth of 5,600 employees. The project's 325 employees would represent approximately 5.8 percent of the anticipated job growth in the City. Thus, the project would not exceed the population and employment forecasts and would be consistent with the projections in the 2020-2045 RTP/SCS. Since ICAPCD has incorporated the 2020-2045 RTP/SCS projections into the Ozone Plan and PM₁₀ Plan, it can be concluded that the project would also be consistent with the Ozone Plan and PM₁₀ Plan.

Therefore, with the approval of the General Plan Amendment and Zoning Change, the project would be consistent with the types, intensity, and patterns of land use envisioned for the site vicinity and would be considered consistent with the General Plan. Further, the population and housing projections, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City. As the ICAPCD has incorporated these same projections into the Ozone Plan and PM₁₀ Plan, it can be

³ City of Brawley Official Zoning Map, https://www.brawley-ca.gov/assets/planning/zoning_and_ordinances/city-of-brawley-zoning-map.pdf, accessed April 9, 2025.

⁴ City of Brawley Official Land Use Map, https://www.brawley-ca.gov/assets/planning/long_range_planning/city-of-brawley-land-use-map.pdf, accessed April 9, 2025.

⁵ California Department of Finance, *Population and Housing Estimates for Cities, Counties, and the State, January 2021-2024, with 2020 Benchmark*, <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2024/>, accessed April 9, 2025.

⁶ Southern California Association of Governments, *Connect SoCal 2020, Demographics and Growth Forecast*, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579, accessed April 9, 2025.

⁷ Ibid.

concluded that the proposed project would be consistent with the projections. Impacts would be less than significant.

Mitigation Measures: No mitigation is required.

AQ-2 WOULD THE PROJECT 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?

Level of Significance: Less Than Significant Impact.

Construction

Refer to Appendix A, Air Quality Emissions Data, for the detailed CalEEMod output. Table 4, Maximum Daily Construction Emissions, summarizes the estimated maximum daily emissions of VOC (ROG), NO_x, CO, SO₂, PM₁₀, and PM_{2.5}.

**Table 4
Maximum Daily Construction Emissions**

Scenario	Pollutant (pounds/day) ^{1,2,3}					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Year 1 (2026) Construction Emissions	3.95	29.3	62.7	0.07	7.21	2.19
Year 2 (2027) Construction Emissions	3.76	16.1	58.1	0.05	7.17	1.99
Year 3 (2028) Construction Emissions	67.6	15.8	64.0	0.05	8.31	2.24
Maximum Daily Emissions	67.6	29.3	64.0	0.07	8.31	2.24
<i>ICAPCD Thresholds⁴</i>	75	100	550	N/A	150	N/A
Threshold Exceeded?	No	No	No	N/A	No	N/A
Notes: 1. Emissions were calculated using CalEEMod, version 2022.1. Maximum emissions during summer or winter are presented here to represent the worst-case scenario. 2. Modeling assumptions include compliance with ICAPCD Regulation VIII which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water or stabilize exposed surfaces; cover stockpiles with tarps; and water or stabilize unpaved roads. 3. For Imperial County, CalEEMod assumes 50 percent paved and 50 percent unpaved roads as provided by ICAPCD. However, this does not represent typical characteristics of the roads in the vicinity of the project site. As the project site is in an urban area and adjacent to Highway 86, all worker, vendor, and hauling trips would travel on paved roads. Therefore, 100 percent paved roads were modeled during construction activities. 4. ICAPCD does not require quantitative construction emissions analysis for projects that do not exceed the operational emissions thresholds (Tier 1 projects). However, construction emissions were quantified and compared to ICAPCD construction emissions thresholds for informational purposes. ICAPCD does not establish thresholds for SO ₂ or PM _{2.5} .						
Source: Refer to <u>Appendix A</u> for assumptions used in this analysis.						

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from grading

and construction is expected to be short-term and would cease upon project completion. It should be noted that most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM_{10} generated as a part of fugitive dust emissions. PM_{10} poses a serious health hazard alone or in combination with other pollutants. $PM_{2.5}$ is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. $PM_{2.5}$ is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_x and sulfur oxides (SO_x) combining with ammonia. $PM_{2.5}$ components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

It should be noted that Imperial County roadways experience higher levels of entrained roadway dust and therefore CalEEMod default values for Imperial County assume 50 percent of travel on paved road. However, as the project site is located in an urban area and adjacent to Highway 86, all worker, vendor, and hauling trips would travel on paved roads. Therefore, 100 percent paved roads were modeled during construction activities. The project would also implement all dust control techniques required under ICAPCD regulations. Applicable regulations include those established by ICAPCD Regulation VIII, which requires that excessive fugitive dust emissions be controlled by regular watering or other dust prevention measures to reduce PM_{10} concentrations. A Dust Control Plan with enhanced dust control measures and identifying all sources of PM_{10} and $PM_{2.5}$ would also be provided to the ICAPCD for approval. These modeling assumptions and measures based on ICAPCD regulations were applied in CalEEMod. As depicted in [Table 4](#), total fugitive dust (PM_{10}) emissions during construction would not exceed applicable ICAPCD threshold; ICAPCD does not establish threshold for $PM_{2.5}$. Thus, impacts in this regard would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions (e.g., NO_x and CO) from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As depicted in [Table 4](#), construction equipment and worker vehicle exhaust emissions would be below the established ICAPCD thresholds. Therefore, air quality impacts from equipment and vehicle exhaust emissions would be less than significant.

ROG Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. As required, all architectural coatings for the proposed project structures would comply with ICAPCD Rule 424. Rule 424 provides specifications on painting practices as well as regulates the ROG content of paint. ROG emissions associated with the proposed project would be less than significant; refer to [Table 4](#).

Total Daily Construction Emissions

In accordance with the ICAPCD Guidelines, CalEEMod was utilized to model construction emissions for ROG, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. As indicated in [Table 4](#), criteria pollutant emissions during construction of the proposed project would not exceed the ICAPCD significance thresholds. Thus, total construction related air emissions would be less than significant.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are human health hazards when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, federal, and international agencies and was identified as a toxic air contaminant by CARB in 1986. Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the California Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report* (August 2000), serpentinite and ultramafic rocks are not known to occur within the project area.⁸ As such, impacts would be less than significant.

Operations

Long-term air quality impacts typically consist of mobile source emissions generated from project-related traffic (i.e., motor vehicle use by employees, deliveries travelling to and from the site), and emissions from area and energy sources. Emissions associated with each of these sources were calculated and are discussed below. Operational emissions generated by the proposed project are detailed in [Table 5, *Maximum Operational Emissions*](#).

⁸ California Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, August 2000, https://ww3.arb.ca.gov/toxics/asbestos/ofr_2000-019.pdf, accessed April 9, 2025.

Table 5
Maximum Operational Emissions

Scenario	Emissions (pounds per day) ¹					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Project Summer Emissions						
Mobile Source	60.80	35.90	365.00	0.71	58.50	15.20
Area Source	17.90	3.46	1.47	0.02	0.28	0.28
Energy Source	0.00	0.00	0.00	0.00	0.00	0.00
Total Project Maximum Daily Emissions²	78.7	39.36	366.47	0.73	58.78	15.48
<i>ICAPCD Regional Threshold</i>	137	137	550	150	150	550
Threshold Exceeded?	No	No	No	No	No	No
Project Winter Emissions						
Mobile Source	46.60	39.80	266.00	0.63	58.50	15.20
Area Source	17.90	3.46	1.47	0.02	0.28	0.28
Energy Source	0.00	0.00	0.00	0.00	0.00	0.00
Total Project Maximum Daily Emission²	64.50	43.26	267.47	0.65	58.78	15.48
<i>ICAPCD Regional Threshold</i>	137	137	550	150	150	550
Threshold Exceeded?	No	No	No	No	No	No
Notes:						
1. Emissions were calculated using CalEEMod, version 2022.1.						
2. The numbers may be slightly off due to rounding.						
Refer to Appendix A for assumptions used in this analysis.						

Mobile Source

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_x, SO_x, PM₁₀, and PM_{2.5} are all pollutants of regional concern (NO_x and ROG react with sunlight to form O₃ [photochemical smog], and wind currents readily transport SO_x, PM₁₀, and PM_{2.5}). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions have been estimated using CalEEMod. According to the transportation analysis (Michael Baker 2025), the project would generate approximately 14,307 daily trips. As shown in [Table 5](#), emissions generated by vehicle traffic associated with the project would not exceed established ICAPCD thresholds.

Area Source Emissions

Area source emissions would be generated from consumer products, architectural coatings, and landscaping. According to the project applicant, the proposed project would utilize all-electric landscaping equipment. However, as a conservative estimate, this feature was not accounted for in the modeling. The project's criteria pollutant emissions from area sources would not exceed the established thresholds; refer to [Table 5](#).

Energy Source Emissions

The primary use of electricity by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, landscaping equipment, and electronics. Criteria air pollutant emissions

from electricity use were not quantified since criteria pollutants emissions occur at the site of the power plant, which is off-site. The project would install high efficiency appliances and solar panels. However, as a conservative analysis, these project design features were not accounted for in the modeling. According to the project applicant, the project would not use natural gas on-site. Therefore, the project would not generate energy source criteria pollutant emissions; refer to [Table 5](#).

Total Operational Emissions

As shown in [Table 5](#), the total operational emissions would not exceed the ICAPCD significance thresholds. Therefore, impacts in this regard would be less than significant.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, ozone precursors VOCs and NO_x affect air quality on a regional scale. Health effects related to ozone are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

As noted in the Brief of Amicus Curiae by the South Coast Air Quality Management District (SCAQMD), the SCAQMD acknowledged it would be extremely difficult, if not impossible, to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD), SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that health effects quantification from ozone, as an example is correlated with the increases in ambient level of ozone in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient ozone levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's 2012 Air Quality Management Plan, a reduction of 432 tons (864,000 pounds) per day of NO_x and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce ozone levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. As such, for the purpose of this analysis, since the project would not exceed ICAPCD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts as well.

Mitigation Measures: No mitigation is required.

AQ-3 WOULD THE PROJECT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS?

Level of Significance: Less Than Significant Impact.

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 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. As discussed above, although the nearest existing sensitive receptor is a church (Gateway Church of Brawley) located approximately 130 feet to the west, a residential community comprised of single-family residences is currently being constructed and is most likely to be occupied prior to the construction completion of the proposed project. As such, the future single-family residential uses located approximately 75 feet to the northeast are analyzed as the nearest sensitive receptor.

Localized Air Quality Health Impacts

Construction

Project construction activities are anticipated to involve the operation of diesel-powered equipment, which would emit diesel particulate matter (DPM). In 1998, the CARB identified diesel exhaust as a toxic air contaminant (TAC). Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 30-year exposure period often is assumed. The project would construct mixed-use buildings while complying with the California Code of Regulations (CCR), Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. Implementation of these regulations would reduce the amount of DPM emissions from the construction of the project.

The nearest sensitive receptors to the project site are future single-family residences located approximately 75 feet to the northeast of the project boundary. However, health impacts on sensitive receptors associated with exposure to DPM from project construction are anticipated to be less than significant because construction activities are expected to occur well below the 30-year exposure period used in health risk assessments. Additionally, emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, construction of the proposed project is not anticipated to result in an elevated cancer risk to nearby sensitive receptors and the impact would be less than significant.

Operations

The project would involve construction and operation of a residential and commercial development and would result in limited operational activities with potential health risks, including occasional diesel truck trips for trash pickups, deliveries, and landscaping maintenance operations. None of these activities would result in the generation of excessive TAC emissions, or associated health risks from the project's operation. Therefore, operation of the proposed project is not anticipated to result in an elevated cancer risk to nearby sensitive receptors. Impacts would be less than significant in this regard.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (e.g., adversely affecting residents, school children, hospital patients, and the elderly).

The Basin is designated as an attainment/maintenance area for the federal CO standards and an attainment area under State standards. There has been a decline in CO emissions even though VMT on U.S. urban and rural roads have increased; estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions. Three major control programs have contributed to the reduced per-vehicle CO emissions, including exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

A potential CO hotspot may occur at any location where the background CO concentration already exceeds 20 parts per million (ppm), which is the 1-hour California ambient air quality standard. As shown in [Table 1](#), the closest monitoring station to the project site that monitors CO concentration is the El Centro-9th Street Monitoring Station, and the maximum CO concentration was measured at 5.066 ppm in 2022, the latest year with available data. Given that the background CO concentration does not currently exceed 20 ppm, a CO hotspot would not occur at the project site. Therefore, CO hotspot impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

AQ-4 WOULD THE PROJECT RESULT IN OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS) ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE?

Level of Significance: Less Than Significant Impact.

According to the ICAPCD CEQA Air Quality Handbook, land uses associated with odor complaints typically include wastewater treatment plants, sanitary landfills, composting stations, feedlots, asphalt plants, painting and coating operations, and rendering plants. The project does not propose any uses identified by the ICAPCD as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimize the idling time of construction equipment either by requiring equipment to be shut off when not in use or limiting idling time to no more than five minutes. Compliance with these existing regulations would further reduce the detectable odors from heavy-duty equipment exhaust. Any odor impacts to existing adjacent land uses would be short-term and negligible. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

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Appendix A

Air Quality Emissions Data

Brawley Mixed Use Master Plan Update Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Brawley Mixed Use Master Plan Update
Construction Start Date	2/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	32.95831906859517, -115.54708285106608
County	Imperial
City	Brawley
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5602
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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
Hotel	150	Room	4.54	122,905	18,731	—	—	—

Condo/Townhouse	408	Dwelling Unit	28.8	273,288	101,016	—	1,452	—
Regional Shopping Center	243	1000sqft	21.6	243,000	95,832	—	—	—
Strip Mall	65.5	1000sqft	9.86	65,500	0.00	—	—	—
Parking Lot	2,510	Space	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	68.4	67.6	29.1	64.0	0.07	1.15	9.90	11.1	1.06	3.84	4.90	—	13,664	13,664	0.45	0.74	30.9	13,924
Mit.	68.4	67.6	29.1	64.0	0.07	1.15	7.94	8.31	1.06	1.90	2.24	—	13,664	13,664	0.45	0.74	30.9	13,924
% Reduced	—	—	—	—	—	—	20%	25%	—	50%	54%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	65.1	64.9	29.3	41.8	0.07	1.15	9.90	11.1	1.06	3.84	4.90	—	11,601	11,601	0.42	0.73	0.80	11,829
Mit.	65.1	64.9	29.3	41.8	0.07	1.15	6.78	7.21	1.06	1.63	2.19	—	11,601	11,601	0.42	0.73	0.80	11,829

% Reduced	—	—	—	—	—	—	32%	35%	—	57%	55%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	28.2	28.0	14.6	32.5	0.04	0.49	5.34	5.83	0.46	1.71	2.17	—	8,463	8,463	0.29	0.51	8.56	8,631
Mit.	28.2	28.0	14.6	32.5	0.04	0.49	4.83	5.11	0.46	1.16	1.42	—	8,463	8,463	0.29	0.51	8.56	8,631
% Reduced	—	—	—	—	—	—	10%	12%	—	32%	34%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.15	5.11	2.67	5.92	0.01	0.09	0.97	1.06	0.08	0.31	0.40	—	1,401	1,401	0.05	0.08	1.42	1,429
Mit.	5.15	5.11	2.67	5.92	0.01	0.09	0.88	0.93	0.08	0.21	0.26	—	1,401	1,401	0.05	0.08	1.42	1,429
% Reduced	—	—	—	—	—	—	10%	12%	—	32%	34%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.43	3.95	29.1	62.7	0.07	1.15	9.90	11.1	1.06	3.84	4.90	—	12,637	12,637	0.40	0.73	30.9	12,895
2027	4.22	3.76	15.4	58.1	0.05	0.39	6.78	7.17	0.36	1.63	1.99	—	12,448	12,448	0.40	0.73	27.7	12,702
2028	68.4	67.6	15.8	64.0	0.05	0.37	7.94	8.31	0.34	1.90	2.24	—	13,664	13,664	0.45	0.74	28.4	13,924
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.84	3.36	29.3	41.8	0.07	1.15	9.90	11.1	1.06	3.84	4.90	—	11,601	11,601	0.42	0.73	0.80	11,829
2027	3.49	3.05	16.1	38.9	0.05	0.39	6.78	7.17	0.36	1.63	1.99	—	11,432	11,432	0.42	0.73	0.72	11,660
2028	65.1	64.9	15.3	37.1	0.05	0.35	6.78	7.13	0.33	1.63	1.96	—	11,242	11,242	0.23	0.70	0.64	11,457

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.55	2.20	14.6	26.3	0.04	0.49	5.34	5.83	0.46	1.71	2.17	—	6,800	6,800	0.23	0.35	5.34	6,916
2027	2.75	2.42	11.3	32.5	0.04	0.28	4.83	5.11	0.26	1.16	1.42	—	8,463	8,463	0.29	0.51	8.56	8,631
2028	28.2	28.0	7.47	20.8	0.02	0.19	2.94	3.13	0.18	0.70	0.88	—	5,102	5,102	0.18	0.27	4.53	5,191
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.47	0.40	2.67	4.80	0.01	0.09	0.97	1.06	0.08	0.31	0.40	—	1,126	1,126	0.04	0.06	0.88	1,145
2027	0.50	0.44	2.06	5.92	0.01	0.05	0.88	0.93	0.05	0.21	0.26	—	1,401	1,401	0.05	0.08	1.42	1,429
2028	5.15	5.11	1.36	3.79	< 0.005	0.04	0.54	0.57	0.03	0.13	0.16	—	845	845	0.03	0.04	0.75	859

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.43	3.95	29.1	62.7	0.07	1.15	6.78	7.21	1.06	1.63	2.19	—	12,637	12,637	0.40	0.73	30.9	12,895
2027	4.22	3.76	15.4	58.1	0.05	0.39	6.78	7.17	0.36	1.63	1.99	—	12,448	12,448	0.40	0.73	27.7	12,702
2028	68.4	67.6	15.8	64.0	0.05	0.37	7.94	8.31	0.34	1.90	2.24	—	13,664	13,664	0.45	0.74	28.4	13,924
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.84	3.36	29.3	41.8	0.07	1.15	6.78	7.21	1.06	1.63	2.19	—	11,601	11,601	0.42	0.73	0.80	11,829
2027	3.49	3.05	16.1	38.9	0.05	0.39	6.78	7.17	0.36	1.63	1.99	—	11,432	11,432	0.42	0.73	0.72	11,660
2028	65.1	64.9	15.3	37.1	0.05	0.35	6.78	7.13	0.33	1.63	1.96	—	11,242	11,242	0.23	0.70	0.64	11,457
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.55	2.20	14.6	26.3	0.04	0.49	3.34	3.83	0.46	0.92	1.37	—	6,800	6,800	0.23	0.35	5.34	6,916
2027	2.75	2.42	11.3	32.5	0.04	0.28	4.83	5.11	0.26	1.16	1.42	—	8,463	8,463	0.29	0.51	8.56	8,631
2028	28.2	28.0	7.47	20.8	0.02	0.19	2.94	3.13	0.18	0.70	0.88	—	5,102	5,102	0.18	0.27	4.53	5,191

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.47	0.40	2.67	4.80	0.01	0.09	0.61	0.70	0.08	0.17	0.25	—	1,126	1,126	0.04	0.06	0.88	1,145
2027	0.50	0.44	2.06	5.92	0.01	0.05	0.88	0.93	0.05	0.21	0.26	—	1,401	1,401	0.05	0.08	1.42	1,429
2028	5.15	5.11	1.36	3.79	< 0.005	0.04	0.54	0.57	0.03	0.13	0.16	—	845	845	0.03	0.04	0.75	859

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	87.2	83.8	39.8	408	0.74	0.83	58.0	58.8	0.78	14.7	15.5	468	92,119	92,586	51.2	3.78	410	95,405
Mit.	81.7	78.7	39.4	367	0.74	0.78	58.0	58.8	0.75	14.7	15.4	468	92,009	92,476	51.2	3.78	410	95,294
% Reduced	6%	6%	1%	10%	< 0.5%	5%	—	< 0.5%	4%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	67.6	64.5	43.2	268	0.65	0.78	58.0	58.8	0.75	14.7	15.4	468	83,417	83,884	51.5	3.91	201	86,538
Mit.	67.6	64.5	43.2	268	0.65	0.78	58.0	58.8	0.75	14.7	15.4	468	83,417	83,884	51.5	3.91	201	86,538
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	73.8	70.9	38.0	308	0.65	0.52	56.7	57.2	0.48	14.3	14.8	468	81,314	81,782	51.2	3.77	286	84,471
Mit.	71.1	68.3	37.8	288	0.65	0.50	56.7	57.2	0.46	14.3	14.8	468	81,260	81,728	51.2	3.77	286	84,416
% Reduced	4%	4%	< 0.5%	7%	< 0.5%	4%	—	< 0.5%	3%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.5	12.9	6.93	56.3	0.12	0.09	10.3	10.4	0.09	2.62	2.71	77.4	13,463	13,540	8.47	0.62	47.4	13,985

Mit.	13.0	12.5	6.90	52.5	0.12	0.09	10.3	10.4	0.08	2.62	2.70	77.4	13,454	13,531	8.47	0.62	47.4	13,976
% Reduced	4%	4%	< 0.5%	7%	< 0.5%	4%	—	< 0.5%	3%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	63.6	60.8	35.9	365	0.71	0.50	58.0	58.5	0.47	14.7	15.2	—	72,580	72,580	3.08	3.43	214	73,895
Area	23.6	23.0	3.84	43.4	0.02	0.32	—	0.32	0.31	—	0.31	0.00	4,534	4,534	0.09	0.01	—	4,539
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	14,718	14,718	1.06	0.13	—	14,783
Water	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Waste	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Total	87.2	83.8	39.8	408	0.74	0.83	58.0	58.8	0.78	14.7	15.5	468	92,119	92,586	51.2	3.78	410	95,405
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	49.4	46.6	39.8	266	0.63	0.50	58.0	58.5	0.47	14.7	15.2	—	64,017	64,017	3.42	3.56	5.56	65,168
Area	18.1	17.9	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	14,718	14,718	1.06	0.13	—	14,783
Water	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Waste	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Total	67.6	64.5	43.2	268	0.65	0.78	58.0	58.8	0.75	14.7	15.4	468	83,417	83,884	51.5	3.91	201	86,538
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	53.3	50.6	37.7	288	0.65	0.49	56.7	57.1	0.46	14.3	14.8	—	66,190	66,190	3.14	3.43	90.7	67,380

Area	20.4	20.3	0.23	20.7	< 0.005	0.03	—	0.03	0.02	—	0.02	0.00	120	120	< 0.005	< 0.005	—	121
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	14,718	14,718	1.06	0.13	—	14,783
Water	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Waste	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Total	73.8	70.9	38.0	308	0.65	0.52	56.7	57.2	0.48	14.3	14.8	468	81,314	81,782	51.2	3.77	286	84,471
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.73	9.23	6.89	52.5	0.12	0.09	10.3	10.4	0.08	2.62	2.70	—	10,958	10,958	0.52	0.57	15.0	11,156
Area	3.73	3.70	0.04	3.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	19.9	19.9	< 0.005	< 0.005	—	20.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,437	2,437	0.18	0.02	—	2,448
Water	—	—	—	—	—	—	—	—	—	—	—	14.3	47.3	61.6	1.47	0.04	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	63.1	0.00	63.1	6.31	0.00	—	221
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32.4	32.4
Total	13.5	12.9	6.93	56.3	0.12	0.09	10.3	10.4	0.09	2.62	2.71	77.4	13,463	13,540	8.47	0.62	47.4	13,985

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	63.6	60.8	35.9	365	0.71	0.50	58.0	58.5	0.47	14.7	15.2	—	72,580	72,580	3.08	3.43	214	73,895
Area	18.1	17.9	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	14,747	14,747	1.07	0.13	—	14,812
Water	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Waste	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Total	81.7	78.7	39.4	367	0.74	0.78	58.0	58.8	0.75	14.7	15.4	468	92,009	92,476	51.2	3.78	410	95,294

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	49.4	46.6	39.8	266	0.63	0.50	58.0	58.5	0.47	14.7	15.2	—	64,017	64,017	3.42	3.56	5.56	65,168
Area	18.1	17.9	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	14,718	14,718	1.06	0.13	—	14,783
Water	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Waste	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Total	67.6	64.5	43.2	268	0.65	0.78	58.0	58.8	0.75	14.7	15.4	468	83,417	83,884	51.5	3.91	201	86,538
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	53.3	50.6	37.7	288	0.65	0.49	56.7	57.1	0.46	14.3	14.8	—	66,190	66,190	3.14	3.43	90.7	67,380
Area	17.7	17.7	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	51.8	51.8	< 0.005	< 0.005	—	51.8
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	14,733	14,733	1.06	0.13	—	14,798
Water	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Waste	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Total	71.1	68.3	37.8	288	0.65	0.50	56.7	57.2	0.46	14.3	14.8	468	81,260	81,728	51.2	3.77	286	84,416
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.73	9.23	6.89	52.5	0.12	0.09	10.3	10.4	0.08	2.62	2.70	—	10,958	10,958	0.52	0.57	15.0	11,156
Area	3.24	3.24	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.57	8.57	< 0.005	< 0.005	—	8.58
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,439	2,439	0.18	0.02	—	2,450
Water	—	—	—	—	—	—	—	—	—	—	—	14.3	47.3	61.6	1.47	0.04	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	63.1	0.00	63.1	6.31	0.00	—	221
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32.4	32.4
Total	13.0	12.5	6.90	52.5	0.12	0.09	10.3	10.4	0.08	2.62	2.70	77.4	13,454	13,531	8.47	0.62	47.4	13,976

3. Construction Emissions Details

3.1. Grading (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.22	9.22	—	3.66	3.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.22	9.22	—	3.66	3.66	—	—	—	—	—	—	—
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	1.06	0.89	7.98	8.08	0.02	0.33	—	0.33	0.30	—	0.30	—	1,934	1,934	0.08	0.02	—	1,941

Dust From Material Movement	—	—	—	—	—	—	2.70	2.70	—	1.07	1.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.46	1.48	< 0.005	0.06	—	0.06	0.06	—	0.06	—	320	320	0.01	< 0.005	—	321
Dust From Material Movement	—	—	—	—	—	—	0.49	0.49	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.11	2.16	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	302	302	0.01	0.01	0.99	306
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	0.03	1.73	0.44	0.01	0.03	0.42	0.45	0.03	0.12	0.15	—	1,554	1,554	0.01	0.24	3.26	1,630
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.13	1.22	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	255	255	0.01	0.01	0.03	259
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	0.03	1.90	0.45	0.01	0.03	0.42	0.45	0.03	0.12	0.15	—	1,555	1,555	0.01	0.24	0.08	1,628
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.45	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	80.5	80.5	< 0.005	< 0.005	0.13	81.6
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	0.00

Hauling	0.01	0.01	0.55	0.13	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	456	456	< 0.005	0.07	0.41	478
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	0.02	13.5
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	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.4	75.4	< 0.005	0.01	0.07	79.1

3.2. Grading (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	2.40	2.40	—	0.95	0.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	2.40	2.40	—	0.95	0.95	—	—	—	—	—	—	—

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 Equipm ent	1.06	0.89	7.98	8.08	0.02	0.33	—	0.33	0.30	—	0.30	—	1,934	1,934	0.08	0.02	—	1,941
Dust From Material Movement	—	—	—	—	—	—	0.70	0.70	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.19	0.16	1.46	1.48	< 0.005	0.06	—	0.06	0.06	—	0.06	—	320	320	0.01	< 0.005	—	321
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.11	2.16	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	302	302	0.01	0.01	0.99	306
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	0.03	1.73	0.44	0.01	0.03	0.42	0.45	0.03	0.12	0.15	—	1,554	1,554	0.01	0.24	3.26	1,630
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.13	1.22	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	255	255	0.01	0.01	0.03	259

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	0.03	1.90	0.45	0.01	0.03	0.42	0.45	0.03	0.12	0.15	—	1,555	1,555	0.01	0.24	0.08	1,628
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.45	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	80.5	80.5	< 0.005	< 0.005	0.13	81.6
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	0.00
Hauling	0.01	0.01	0.55	0.13	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	456	456	< 0.005	0.07	0.41	478
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	0.02	13.5
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	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.4	75.4	< 0.005	0.01	0.07	79.1

3.3. Building Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.46	0.39	3.55	4.67	0.01	0.14	—	0.14	0.13	—	0.13	—	863	863	0.04	0.01	—	866
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.08	0.07	0.65	0.85	< 0.005	0.02	—	0.02	0.02	—	0.02	—	143	143	0.01	< 0.005	—	143
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.96	2.74	2.54	48.0	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	6,710	6,710	0.26	0.22	22.0	6,804
Vendor	0.20	0.15	3.82	1.72	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,530	3,530	0.04	0.49	8.86	3,686
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.39	2.16	2.90	27.1	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	5,670	5,670	0.28	0.22	0.57	5,744
Vendor	0.18	0.13	4.20	1.76	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,533	3,533	0.04	0.49	0.23	3,680
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.92	0.84	1.04	12.3	0.00	0.00	2.08	2.08	0.00	0.49	0.49	—	2,195	2,195	0.10	0.08	3.42	2,225
Vendor	0.06	0.05	1.49	0.63	0.01	0.02	0.35	0.37	0.02	0.10	0.12	—	1,272	1,272	0.02	0.18	1.38	1,326

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.19	2.25	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	363	363	0.02	0.01	0.57	368
Vendor	0.01	0.01	0.27	0.11	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	211	211	< 0.005	0.03	0.23	219
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Building Construction (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.55	4.67	0.01	0.14	—	0.14	0.13	—	0.13	—	863	863	0.04	0.01	—	866

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.08	0.07	0.65	0.85	< 0.005	0.02	—	0.02	0.02	—	0.02	—	143	143	0.01	< 0.005	—	143
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.96	2.74	2.54	48.0	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	6,710	6,710	0.26	0.22	22.0	6,804
Vendor	0.20	0.15	3.82	1.72	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,530	3,530	0.04	0.49	8.86	3,686
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.39	2.16	2.90	27.1	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	5,670	5,670	0.28	0.22	0.57	5,744
Vendor	0.18	0.13	4.20	1.76	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,533	3,533	0.04	0.49	0.23	3,680
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.92	0.84	1.04	12.3	0.00	0.00	2.08	2.08	0.00	0.49	0.49	—	2,195	2,195	0.10	0.08	3.42	2,225
Vendor	0.06	0.05	1.49	0.63	0.01	0.02	0.35	0.37	0.02	0.10	0.12	—	1,272	1,272	0.02	0.18	1.38	1,326
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.19	2.25	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	363	363	0.02	0.01	0.57	368
Vendor	0.01	0.01	0.27	0.11	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	211	211	< 0.005	0.03	0.23	219
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.80	2.59	2.34	43.5	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	6,593	6,593	0.26	0.22	20.0	6,685
Vendor	0.19	0.14	3.65	1.60	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,458	3,458	0.04	0.49	7.72	3,612
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.11	1.89	2.70	24.3	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	5,574	5,574	0.28	0.22	0.52	5,647
Vendor	0.14	0.13	4.01	1.64	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,461	3,461	0.04	0.49	0.20	3,608
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.74	1.58	1.78	22.1	0.00	0.00	4.13	4.13	0.00	0.97	0.97	—	4,279	4,279	0.19	0.15	6.18	4,335
Vendor	0.13	0.10	2.81	1.16	0.02	0.04	0.70	0.73	0.04	0.19	0.23	—	2,471	2,471	0.03	0.35	2.38	2,578
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	0.33	4.03	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	709	709	0.03	0.02	1.02	718
Vendor	0.02	0.02	0.51	0.21	< 0.005	0.01	0.13	0.13	0.01	0.04	0.04	—	409	409	0.01	0.06	0.39	427
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2027) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.80	2.59	2.34	43.5	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	6,593	6,593	0.26	0.22	20.0	6,685
Vendor	0.19	0.14	3.65	1.60	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,458	3,458	0.04	0.49	7.72	3,612
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.11	1.89	2.70	24.3	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	5,574	5,574	0.28	0.22	0.52	5,647
Vendor	0.14	0.13	4.01	1.64	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,461	3,461	0.04	0.49	0.20	3,608
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.74	1.58	1.78	22.1	0.00	0.00	4.13	4.13	0.00	0.97	0.97	—	4,279	4,279	0.19	0.15	6.18	4,335
Vendor	0.13	0.10	2.81	1.16	0.02	0.04	0.70	0.73	0.04	0.19	0.23	—	2,471	2,471	0.03	0.35	2.38	2,578
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	0.33	4.03	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	709	709	0.03	0.02	1.02	718
Vendor	0.02	0.02	0.51	0.21	< 0.005	0.01	0.13	0.13	0.01	0.04	0.04	—	409	409	0.01	0.06	0.39	427
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.42	0.35	3.18	4.61	0.01	0.11	—	0.11	0.10	—	0.10	—	854	854	0.03	0.01	—	857
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.08	0.06	0.58	0.84	< 0.005	0.02	—	0.02	0.02	—	0.02	—	141	141	0.01	< 0.005	—	142
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.28	2.13	40.4	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	6,468	6,468	0.25	0.22	18.2	6,558
Vendor	0.16	0.12	3.51	1.48	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,371	3,371	0.04	0.46	6.62	3,515
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.02	1.80	2.50	22.6	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	5,470	5,470	0.09	0.22	0.47	5,539
Vendor	0.14	0.10	3.84	1.54	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,374	3,374	0.04	0.46	0.17	3,512
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.69	0.82	10.2	0.00	0.00	2.06	2.06	0.00	0.48	0.48	—	2,094	2,094	0.09	0.07	2.80	2,121
Vendor	0.05	0.04	1.34	0.54	0.01	0.02	0.35	0.37	0.02	0.10	0.11	—	1,201	1,201	0.01	0.16	1.02	1,251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.15	1.86	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	347	347	0.02	0.01	0.46	351
Vendor	0.01	0.01	0.25	0.10	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	199	199	< 0.005	0.03	0.17	207
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm ent	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.42	0.35	3.18	4.61	0.01	0.11	—	0.11	0.10	—	0.10	—	854	854	0.03	0.01	—	857
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.08	0.06	0.58	0.84	< 0.005	0.02	—	0.02	0.02	—	0.02	—	141	141	0.01	< 0.005	—	142
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.28	2.13	40.4	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	6,468	6,468	0.25	0.22	18.2	6,558
Vendor	0.16	0.12	3.51	1.48	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,371	3,371	0.04	0.46	6.62	3,515
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.02	1.80	2.50	22.6	0.00	0.00	5.80	5.80	0.00	1.36	1.36	—	5,470	5,470	0.09	0.22	0.47	5,539
Vendor	0.14	0.10	3.84	1.54	0.03	0.05	0.98	1.03	0.05	0.27	0.32	—	3,374	3,374	0.04	0.46	0.17	3,512
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.69	0.82	10.2	0.00	0.00	2.06	2.06	0.00	0.48	0.48	—	2,094	2,094	0.09	0.07	2.80	2,121
Vendor	0.05	0.04	1.34	0.54	0.01	0.02	0.35	0.37	0.02	0.10	0.11	—	1,201	1,201	0.01	0.16	1.02	1,251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.15	1.86	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	347	347	0.02	0.01	0.46	351
Vendor	0.01	0.01	0.25	0.10	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	199	199	< 0.005	0.03	0.17	207
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.19	0.16	1.58	2.36	< 0.005	0.06	—	0.06	0.06	—	0.06	—	360	360	0.01	< 0.005	—	361
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.04	0.03	0.29	0.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.6	59.6	< 0.005	< 0.005	—	59.8
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.36	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	218	218	0.01	0.01	0.61	222
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	185	185	< 0.005	0.01	0.02	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.3	47.3	< 0.005	< 0.005	0.06	48.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.84	7.84	< 0.005	< 0.005	0.01	7.94
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.58	2.36	< 0.005	0.06	—	0.06	0.06	—	0.06	—	360	360	0.01	< 0.005	—	361
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.6	59.6	< 0.005	< 0.005	—	59.8
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.36	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	218	218	0.01	0.01	0.61	222
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	185	185	< 0.005	0.01	0.02	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.3	47.3	< 0.005	< 0.005	0.06	48.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.84	7.84	< 0.005	< 0.005	0.01	7.94
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	63.7	63.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	63.7	63.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.05	0.04	0.34	0.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	55.6	55.6	< 0.005	< 0.005	—	55.8
Architect ural Coating s	26.5	26.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.21	9.21	< 0.005	< 0.005	—	9.24
Architect ural Coating s	4.84	4.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.46	0.43	8.07	0.00	0.00	1.16	1.16	0.00	0.27	0.27	—	1,294	1,294	0.05	0.04	3.63	1,312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.50	4.52	0.00	0.00	1.16	1.16	0.00	0.27	0.27	—	1,094	1,094	0.02	0.04	0.09	1,108

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.19	2.39	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	490	490	0.02	0.02	0.65	496
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.1	81.1	< 0.005	< 0.005	0.11	82.1
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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	63.7	63.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	63.7	63.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.34	0.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	55.6	55.6	< 0.005	< 0.005	—	55.8
Architectural Coatings	26.5	26.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.21	9.21	< 0.005	< 0.005	—	9.24
Architectural Coatings	4.84	4.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.46	0.43	8.07	0.00	0.00	1.16	1.16	0.00	0.27	0.27	—	1,294	1,294	0.05	0.04	3.63	1,312
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.50	4.52	0.00	0.00	1.16	1.16	0.00	0.27	0.27	—	1,094	1,094	0.02	0.04	0.09	1,108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.19	2.39	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	490	490	0.02	0.02	0.65	496
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.1	81.1	< 0.005	< 0.005	0.11	82.1
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	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	5.52	5.24	3.53	36.9	0.08	0.05	6.22	6.27	0.05	1.57	1.62	—	7,710	7,710	0.29	0.34	23.0	7,842

Condo/Townhouse	12.5	11.9	7.64	79.1	0.16	0.11	13.1	13.2	0.10	3.31	3.41	—	16,236	16,236	0.63	0.74	48.2	16,519
Regional Shopping Center	25.2	24.3	11.8	113	0.20	0.15	15.8	16.0	0.14	4.01	4.14	—	20,192	20,192	1.11	1.09	58.5	20,605
Strip Mall	20.4	19.3	13.0	136	0.28	0.19	22.9	23.1	0.18	5.81	5.99	—	28,442	28,442	1.06	1.26	84.7	28,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	63.6	60.8	35.9	365	0.71	0.50	58.0	58.5	0.47	14.7	15.2	—	72,580	72,580	3.08	3.43	214	73,895
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	4.33	4.04	3.93	26.0	0.07	0.05	6.22	6.27	0.05	1.57	1.62	—	6,792	6,792	0.31	0.36	0.60	6,906
Condo/Townhouse	9.76	9.15	8.48	56.4	0.14	0.11	13.1	13.2	0.10	3.31	3.41	—	14,308	14,308	0.69	0.77	1.25	14,555
Regional Shopping Center	19.4	18.4	12.8	87.6	0.18	0.15	15.8	16.0	0.14	4.01	4.14	—	17,863	17,863	1.26	1.12	1.52	18,231
Strip Mall	16.0	14.9	14.5	96.0	0.25	0.19	22.9	23.1	0.18	5.81	5.99	—	25,054	25,054	1.15	1.31	2.20	25,476
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	49.4	46.6	39.8	266	0.63	0.50	58.0	58.5	0.47	14.7	15.2	—	64,017	64,017	3.42	3.56	5.56	65,168
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.85	0.80	0.69	5.31	0.01	0.01	1.13	1.14	0.01	0.29	0.30	—	1,187	1,187	0.05	0.06	1.64	1,207
Condo/Townhouse	1.92	1.82	1.49	11.4	0.03	0.02	2.37	2.39	0.02	0.60	0.62	—	2,499	2,499	0.11	0.12	3.45	2,542

Regional	3.81	3.66	2.16	16.1	0.03	0.02	2.66	2.69	0.02	0.67	0.70	—	2,895	2,895	0.19	0.17	3.86	2,955
Strip Mall	3.14	2.96	2.55	19.6	0.05	0.04	4.17	4.21	0.03	1.06	1.09	—	4,377	4,377	0.18	0.21	6.06	4,451
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	9.73	9.23	6.89	52.5	0.12	0.09	10.3	10.4	0.08	2.62	2.70	—	10,958	10,958	0.52	0.57	15.0	11,156

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	5.52	5.24	3.53	36.9	0.08	0.05	6.22	6.27	0.05	1.57	1.62	—	7,710	7,710	0.29	0.34	23.0	7,842
Condo/Townhouse	12.5	11.9	7.64	79.1	0.16	0.11	13.1	13.2	0.10	3.31	3.41	—	16,236	16,236	0.63	0.74	48.2	16,519
Regional Shopping Center	25.2	24.3	11.8	113	0.20	0.15	15.8	16.0	0.14	4.01	4.14	—	20,192	20,192	1.11	1.09	58.5	20,605
Strip Mall	20.4	19.3	13.0	136	0.28	0.19	22.9	23.1	0.18	5.81	5.99	—	28,442	28,442	1.06	1.26	84.7	28,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	63.6	60.8	35.9	365	0.71	0.50	58.0	58.5	0.47	14.7	15.2	—	72,580	72,580	3.08	3.43	214	73,895
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	4.33	4.04	3.93	26.0	0.07	0.05	6.22	6.27	0.05	1.57	1.62	—	6,792	6,792	0.31	0.36	0.60	6,906

Condo/Townhouse	9.76	9.15	8.48	56.4	0.14	0.11	13.1	13.2	0.10	3.31	3.41	—	14,308	14,308	0.69	0.77	1.25	14,555
Regional Shopping Center	19.4	18.4	12.8	87.6	0.18	0.15	15.8	16.0	0.14	4.01	4.14	—	17,863	17,863	1.26	1.12	1.52	18,231
Strip Mall	16.0	14.9	14.5	96.0	0.25	0.19	22.9	23.1	0.18	5.81	5.99	—	25,054	25,054	1.15	1.31	2.20	25,476
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	49.4	46.6	39.8	266	0.63	0.50	58.0	58.5	0.47	14.7	15.2	—	64,017	64,017	3.42	3.56	5.56	65,168
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.85	0.80	0.69	5.31	0.01	0.01	1.13	1.14	0.01	0.29	0.30	—	1,187	1,187	0.05	0.06	1.64	1,207
Condo/Townhouse	1.92	1.82	1.49	11.4	0.03	0.02	2.37	2.39	0.02	0.60	0.62	—	2,499	2,499	0.11	0.12	3.45	2,542
Regional Shopping Center	3.81	3.66	2.16	16.1	0.03	0.02	2.66	2.69	0.02	0.67	0.70	—	2,895	2,895	0.19	0.17	3.86	2,955
Strip Mall	3.14	2.96	2.55	19.6	0.05	0.04	4.17	4.21	0.03	1.06	1.09	—	4,377	4,377	0.18	0.21	6.06	4,451
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	9.73	9.23	6.89	52.5	0.12	0.09	10.3	10.4	0.08	2.62	2.70	—	10,958	10,958	0.52	0.57	15.0	11,156

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	3,000	3,000	0.22	0.03	—	3,014
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	3,740	3,740	0.27	0.03	—	3,757
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	4,438	4,438	0.32	0.04	—	4,458
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	3,539	3,539	0.26	0.03	—	3,555
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	14,718	14,718	1.06	0.13	—	14,783
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	3,000	3,000	0.22	0.03	—	3,014
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	3,740	3,740	0.27	0.03	—	3,757
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	4,438	4,438	0.32	0.04	—	4,458
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	3,539	3,539	0.26	0.03	—	3,555
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	14,718	14,718	1.06	0.13	—	14,783
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	497	497	0.04	< 0.005	—	499

Condo/T	—	—	—	—	—	—	—	—	—	—	—	—	619	619	0.04	0.01	—	622
Regiona l Shoppin g Center	—	—	—	—	—	—	—	—	—	—	—	—	735	735	0.05	0.01	—	738
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	586	586	0.04	0.01	—	589
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,437	2,437	0.18	0.02	—	2,448

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	3,005	3,005	0.22	0.03	—	3,018
Condo/T ownhou se	—	—	—	—	—	—	—	—	—	—	—	—	3,754	3,754	0.27	0.03	—	3,771
Regiona l Shoppin g Center	—	—	—	—	—	—	—	—	—	—	—	—	4,447	4,447	0.32	0.04	—	4,466
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	3,542	3,542	0.26	0.03	—	3,557
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	14,747	14,747	1.07	0.13	—	14,812

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	3,000	3,000	0.22	0.03	—	3,014
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	3,740	3,740	0.27	0.03	—	3,757
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	4,438	4,438	0.32	0.04	—	4,458
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	3,539	3,539	0.26	0.03	—	3,555
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	14,718	14,718	1.06	0.13	—	14,783
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	497	497	0.04	< 0.005	—	499
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	620	620	0.04	0.01	—	623
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	735	735	0.05	0.01	—	739
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	586	586	0.04	0.01	—	589
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,439	2,439	0.18	0.02	—	2,450

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.41	0.20	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400
Consumer Products	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.65	2.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.48	5.11	0.38	41.9	< 0.005	0.04	—	0.04	0.03	—	0.03	—	139	139	0.01	< 0.005	—	140
Total	23.6	23.0	3.84	43.4	0.02	0.32	—	0.32	0.31	—	0.31	0.00	4,534	4,534	0.09	0.01	—	4,539
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.41	0.20	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400
Consumer Products	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.65	2.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	18.1	17.9	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.57	8.57	< 0.005	< 0.005	—	8.58
Consumer Products	2.75	2.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.49	0.46	0.03	3.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.4	11.4	< 0.005	< 0.005	—	11.4
Total	3.73	3.70	0.04	3.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	19.9	19.9	< 0.005	< 0.005	—	20.0

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.41	0.20	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400
Consumer Products	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.65	2.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	18.1	17.9	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.41	0.20	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400
Consumer Products	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.65	2.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	18.1	17.9	3.46	1.47	0.02	0.28	—	0.28	0.28	—	0.28	0.00	4,395	4,395	0.08	0.01	—	4,400
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.57	8.57	< 0.005	< 0.005	—	8.58
Consumer Products	2.75	2.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.24	3.24	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.57	8.57	< 0.005	< 0.005	—	8.58

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	7.29	24.1	31.4	0.75	0.02	—	55.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	35.0	119	154	3.60	0.09	—	269

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	34.5	115	149	3.54	0.09	—	263
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	9.30	28.8	38.0	0.96	0.02	—	68.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	7.29	24.1	31.4	0.75	0.02	—	55.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	35.0	119	154	3.60	0.09	—	269
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	34.5	115	149	3.54	0.09	—	263
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	9.30	28.8	38.0	0.96	0.02	—	68.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	1.21	3.99	5.20	0.12	< 0.005	—	9.18
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	5.80	19.6	25.4	0.60	0.01	—	44.6
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	5.71	19.0	24.7	0.59	0.01	—	43.5

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.54	4.76	6.30	0.16	< 0.005	—	11.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14.3	47.3	61.6	1.47	0.04	—	109

4.4.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	7.29	24.1	31.4	0.75	0.02	—	55.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	35.0	119	154	3.60	0.09	—	269
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	34.5	115	149	3.54	0.09	—	263
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	9.30	28.8	38.0	0.96	0.02	—	68.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	7.29	24.1	31.4	0.75	0.02	—	55.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	35.0	119	154	3.60	0.09	—	269

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	34.5	115	149	3.54	0.09	—	263
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	9.30	28.8	38.0	0.96	0.02	—	68.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	86.1	286	372	8.85	0.21	—	657
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	1.21	3.99	5.20	0.12	< 0.005	—	9.18
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	5.80	19.6	25.4	0.60	0.01	—	44.6
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	5.71	19.0	24.7	0.59	0.01	—	43.5
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.54	4.76	6.30	0.16	< 0.005	—	11.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14.3	47.3	61.6	1.47	0.04	—	109

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	44.3	0.00	44.3	4.42	0.00	—	155

Condo/T	—	—	—	—	—	—	—	—	—	—	—	163	0.00	163	16.2	0.00	—	569
Regiona l Shoppin g Center	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.7	0.00	—	481
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	44.3	0.00	44.3	4.42	0.00	—	155
Condo/T ownhou se	—	—	—	—	—	—	—	—	—	—	—	163	0.00	163	16.2	0.00	—	569
Regiona l Shoppin g Center	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.7	0.00	—	481
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	7.33	0.00	7.33	0.73	0.00	—	25.6
Condo/T ownhou se	—	—	—	—	—	—	—	—	—	—	—	26.9	0.00	26.9	2.69	0.00	—	94.2

Regional Shopping	—	—	—	—	—	—	—	—	—	—	—	22.8	0.00	22.8	2.28	0.00	—	79.7
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.14	0.00	6.14	0.61	0.00	—	21.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	63.1	0.00	63.1	6.31	0.00	—	221

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	44.3	0.00	44.3	4.42	0.00	—	155
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	163	0.00	163	16.2	0.00	—	569
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.7	0.00	—	481
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	44.3	0.00	44.3	4.42	0.00	—	155

Condo/T	—	—	—	—	—	—	—	—	—	—	—	163	0.00	163	16.2	0.00	—	569
Regiona l Shoppin g Center	—	—	—	—	—	—	—	—	—	—	—	138	0.00	138	13.7	0.00	—	481
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	381	0.00	381	38.1	0.00	—	1,334
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	7.33	0.00	7.33	0.73	0.00	—	25.6
Condo/T ownhou se	—	—	—	—	—	—	—	—	—	—	—	26.9	0.00	26.9	2.69	0.00	—	94.2
Regiona l Shoppin g Center	—	—	—	—	—	—	—	—	—	—	—	22.8	0.00	22.8	2.28	0.00	—	79.7
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.14	0.00	6.14	0.61	0.00	—	21.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	63.1	0.00	63.1	6.31	0.00	—	221

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	192	192
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.96	1.96
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	192	192
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.96	1.96
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.8	31.8
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32

Regional	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32.4	32.4

4.6.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	192	192
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.96	1.96
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	192	192
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.96	1.96

Regional Shopping	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	196	196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.8	31.8
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32.4	32.4

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

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

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Grading	Grading	2/1/2026	6/30/2026	5.00	107	—
Building Construction	Building Construction	7/1/2026	6/30/2028	5.00	523	—
Paving	Paving	7/1/2028	10/31/2028	5.00	87.0	—
Architectural Coating	Architectural Coating	4/1/2028	10/31/2028	5.00	152	—

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
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37

Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
------------	-----------	-----------------------	----------------	-------------

Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	23.4	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	444	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	114	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	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	88.8	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
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	23.4	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	444	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	114	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	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	88.8	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	833,782	277,927	705,300	235,100	35,284

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)
Grading	20,000	0.00	318	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Hotel	0.00	0%
Condo/Townhouse	—	0%
Regional Shopping Center	0.00	0%
Strip Mall	0.00	0%
Parking Lot	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	457	0.03	< 0.005
2027	0.00	457	0.03	< 0.005
2028	0.00	457	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
Hotel	1,199	1,199	1,199	437,635	8,824	8,824	8,824	3,220,746

Condo/Townhouse	2,750	2,750	2,750	1,003,750	18,529	18,529	18,529	6,763,148
Regional Shopping Center	5,935	5,935	5,935	2,166,275	20,098	22,460	22,460	7,581,986
Strip Mall	4,423	4,423	4,423	1,614,395	32,551	32,551	32,551	11,881,032
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Hotel	1,199	1,199	1,199	437,635	8,824	8,824	8,824	3,220,746
Condo/Townhouse	2,750	2,750	2,750	1,003,750	18,529	18,529	18,529	6,763,148
Regional Shopping Center	5,935	5,935	5,935	2,166,275	20,098	22,460	22,460	7,581,986
Strip Mall	4,423	4,423	4,423	1,614,395	32,551	32,551	32,551	11,881,032
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	224
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	184
Conventional Wood Stoves	0
Catalytic Wood Stoves	0

Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	224
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	184
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
833781.6	277,927	705,300	235,100	35,284

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	2,398,832	457	0.0330	0.0040	0.00
Condo/Townhouse	2,990,290	457	0.0330	0.0040	0.00
Regional Shopping Center	3,548,174	457	0.0330	0.0040	0.00
Strip Mall	2,829,743	457	0.0330	0.0040	0.00
Parking Lot	0.00	457	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)
Hotel	2,398,832	457	0.0330	0.0040	0.00
Condo/Townhouse	2,990,290	457	0.0330	0.0040	0.00
Regional Shopping Center	3,548,174	457	0.0330	0.0040	0.00
Strip Mall	2,829,743	457	0.0330	0.0040	0.00
Parking Lot	0.00	457	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)
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Hotel	3,805,016	383,422
Condo/Townhouse	18,290,354	2,527,294
Regional Shopping Center	17,999,623	1,961,670
Strip Mall	4,851,750	0.00
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	3,805,016	383,422
Condo/Townhouse	18,290,354	2,527,294
Regional Shopping Center	17,999,623	1,961,670
Strip Mall	4,851,750	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	82.1	—
Condo/Townhouse	302	—
Regional Shopping Center	255	—
Strip Mall	68.8	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	82.1	—

Condo/Townhouse	302	—
Regional Shopping Center	255	—
Strip Mall	68.8	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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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	32.0	annual days of extreme heat
Extreme Precipitation	0.15	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

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

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.8
AQ-PM	38.4
AQ-DPM	42.8
Drinking Water	54.9
Lead Risk Housing	38.5
Pesticides	85.9
Toxic Releases	11.8
Traffic	35.0
Effect Indicators	—
CleanUp Sites	72.4
Groundwater	79.7
Haz Waste Facilities/Generators	72.6
Impaired Water Bodies	99.5
Solid Waste	75.7

Sensitive Population	—
Asthma	97.7
Cardio-vascular	87.3
Low Birth Weights	44.8
Socioeconomic Factor Indicators	—
Education	52.9
Housing	8.04
Linguistic	72.8
Poverty	67.4
Unemployment	96.6

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	53.52239189
Employed	49.83959964
Median HI	47.38868215
Education	—
Bachelor's or higher	41.42178878
High school enrollment	100
Preschool enrollment	36.10932888
Transportation	—
Auto Access	57.21801617
Active commuting	27.13974079
Social	—
2-parent households	53.20159117
Voting	66.38008469

Neighborhood	—
Alcohol availability	57.11535994
Park access	53.86885667
Retail density	22.84101116
Supermarket access	60.97780059
Tree canopy	15.86038753
Housing	—
Homeownership	57.34633646
Housing habitability	87.03965097
Low-inc homeowner severe housing cost burden	74.83639163
Low-inc renter severe housing cost burden	97.6774028
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	54.83125882
Arthritis	0.0
Asthma ER Admissions	1.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	32.9
Cognitively Disabled	8.5
Physically Disabled	12.7
Heart Attack ER Admissions	17.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	45.7
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	56.6
Elderly	26.5
English Speaking	39.0
Foreign-born	28.6
Outdoor Workers	44.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	71.2
Traffic Density	25.6
Traffic Access	23.0
Other Indices	—
Hardship	56.8
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	85.0

Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Residential square footage based on site plan. Land use acreage based on lot size Total retail square footage of 431,405 sf Parking based on retail surface parking (1890) plus residential surface parking (620) Landscape area assumed to be 10% of acreage.
Construction: Construction Phases	Per Construction Schedule
Construction: Architectural Coatings	ICAPCD Rule 424
Operations: Vehicle Data	Per trip generation table. Pass-by trips reduction accounted for in total number of trips.
Operations: Hearths	Per applicant, no natural gas usage on-site
Operations: Architectural Coatings	Per ICAPCD Rule 424
Construction: On-Road Fugitive Dust	Project site located adjacent to highway State Route 86, therefore all haul roads and worker commute routes are paved.
Operations: Energy Use	Per project applicant, no natural gas usage on-site.

Operations: Road Dust	Project site located adjacent to highway State Route 86, and all future access roads to the project site will be paved.
Construction: Dust From Material Movement	Per earthwork numbers