# APPENDIX A Air Quality Technical Report



# **Technical Study**

TO: Long Beach Development Services, Planning Bureau

c/o Amy Harbin, Planner

411 West Ocean Boulevard, 3rd Floor

Long Beach, CA 90802

**FROM:** Terry A. Hayes Associates Inc.

3535 Hayden Avenue, Suite 350

Culver City, CA 90232

**DATE:** April 12, 2023

RE: Shoreline Village Renovation Project – Air Quality Impacts Assessment

## **Introduction**

Terry A. Hayes Associates Inc. (TAHA) completed an Air Quality Assessment for the Shoreline Village Renovation Project (proposed project) in accordance with provisions of California Environmental Quality Act (CEQA) Statutes and Guidelines. This Assessment is organized as follows:

- Project Description
- Air Quality Topical Information
- Regulatory Framework
- Existing Setting
- Significance Thresholds
- Methodology
- Impact Assessment
- References

# **Project Description**

The project site is located at 401-435 Shoreline Village Drive in the City of Long Beach on a 313,739-square-foot lot. The proposed project is located in an urban area surrounded by commercial and recreational uses. The project site is bounded to the north by Shoreline Drive, the Marina Green recreational park to the east, Shoreline Village Marina to the south and east, Long Beach Harbor to the south, and Rainbow Harbor and Shoreline Aquatic Park to the west. The existing project site is comprised of a series of commercial buildings, ancillary structures, and surface parking lots. The proposed project includes a combination of renovations, demolitions, and new construction. Building 419 would be renovated to accommodate 169 square feet of converted interior retail space, 551 square feet of new retail space, and 720 square feet of interior restroom facilities. Additional improvements include the replacement or repair of exterior cladding, new windows/doors/storefronts, and new signage, as well as the expansion of the roof and awnings.

Shoreline Village Renovation Project April 12, 2023 Page 2

Demolition activities would include Buildings 421 (179 square feet) and 425 (859 square feet), which are two kiosk structures located within the northwest portion of the project site adjacent to Rainbow Harbor/Rainbow Marina. Building 411—a 4,481 square foot circular tower structure currently occupied by an arcade—would be demolished to accommodate the construction of two new buildings. After demolition of Building 411, the proposed project would construct two new semi-circular buildings totaling 1,270 square feet of retail uses. The two buildings would be oriented in a circular pattern around 1,200 square feet of new outdoor public seating areas.

The proposed project would also construct a two-level, 227-stall parking structure over the existing surface parking area along Shoreline Village Drive, resulting in a net gain of 80 parking stalls compared to existing conditions. The parking garage footprint would be 35,268 square feet and it would contain two levels of parking, totaling approximately 70,536 square feet. With implementation of the proposed project, the overall total parking area (comprised of the surface parking lots and deck) would accommodate 395 standard-sized parking stalls, including 24 electric vehicle (EV) charging stalls, as well as 112 compact parking stalls. On the ground floor, the new parking structure would also accommodate 650 square feet of retail space as well as 1,871 square feet for 28 bicycle storage spaces.

Mural artworks and green landscaping walls would be installed on the façade of the parking garage. Additional site improvements would also include the following newly remodeled public areas: the Hub Plaza, the boardwalk along the northern boundary of the project site fronting Rainbow Harbor, two view corridors within the pedestrian circulation network, Harborside Plaza, and a 700 square foot public viewing deck located on the southern boundary of the project site. Remodeled public areas would be enhanced with new paving, seating and other site furnishings.

Regarding transportation improvements, the surface parking lots on the southern and northern ends of the project site would be repaved, restriped, and landscaped. New parking gates/pay stations would be installed at the access entry points to the project site along Shoreline Village Drive, as well as new stalls with electric vehicle chargers for electric vehicles. The proposed project would not construct new ingress or egress access points to the surface parking lots. The proposed project would also construct a new bike path connection between the existing path along Rainbow Harbor and the Marina Green bike path.

The overall components of the proposed project would result in no net change in the commercial area of 82,368 square feet per the original entitlement. All buildings constructed for the proposed project would be designed to achieve Leadership in Energy and Environmental Design (LEED) Certification. The proposed project would incorporate high efficiency lighting fixtures and water conservation strategies into the newly renovated and constructed buildings.

Construction of the proposed project is anticipated to start in November 2024 and would take approximately 18 months to complete with operations estimated to start in May 2026. Construction activities would generally occur five days per week from Monday through Friday between the hours of 7:00 am to 7:00 pm during the weekdays and 9:00 am to 6:00 pm on Saturdays pursuant to Section 8.80.202 of the Long Beach Municipal Code. Construction activities would require approximately 30 workers per day. Presently, approximately 92 percent of the project site is covered with impervious surfaces (33 percent with buildings, 59 percent paved/hardscape, and eight percent landscaped area. The proposed Project construction activities would not result in an increase in impervious surface area on the project site. However, approximately 3,200 cubic yards of soil would be exported related to the parking structure foundation.

## **Air Quality Topical Information**

Air quality is typically characterized by ambient air concentrations of seven specific pollutants identified by the United States Environmental Protection Agency (USEPA) to be of concern with respect to health and welfare of the general 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 adverse health effects. 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). Federal criteria air pollutants include ground-level ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), respirable particulate matter ten microns or less in diameter (PM<sub>10</sub>), fine particulate matter 2.5 microns or less in diameter (PM<sub>2.5</sub>), and lead. In addition to the federal criteria pollutants, the state regulates visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Air toxics are generally defined as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. Air toxics are also defined as an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects; however, the emission of a toxic chemical does not automatically create a health hazard. Air toxics include, but are not limited to, diesel PM, metals, gases absorbed by particles, and certain vapors from fuels and other sources.

## **Regulatory Framework**

The following discussion includes relevant regulations, policies, and programs that have been adopted by federal, state, regional, and local agencies to protect air quality and public health.

#### **Federal**

The Clean Air Act (CAA) governs air quality at the national level and the USEPA is responsible for enforcing the regulations provided in the CAA. Under the CAA, the USEPA is authorized to establish the NAAQS that set protective limits on concentrations of air pollutants in ambient air. Enforcement of the NAAQS is required under the 1977 CAA and subsequent amendments. As required by the CAA, the NAAQS have been established for the seven criteria air pollutants: O<sub>3</sub>, NO<sub>2</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and Pb. These pollutants are common byproducts of human activities and have been documented through scientific research to cause adverse health effects. The CAA grants the USEPA authority to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS concentrations have been met on a regional scale relying upon air monitoring data from the most recent three-year period. The NAAQS are summarized in **Table 1**.

		Calif	ornia	Fe	deral		
Pollutant	Averaging Period	Standards (CAAQS)	Attainment Status	Standards (NAAQS)	Attainment Status		
Ozone	1-Hour Average	0.09 ppm (180 µg/m³)	Nonattainment				
(O <sub>3</sub> )	8-Hour Average	0.070 ppm (137 μg/m³)	Nonattainment	0.070 ppm (137 μg/m³)	Nonattainment - Extreme		
Carbon	1-Hour Average	20 ppm (23 mg/m³)	Attainment	35.0 ppm (40 mg/m³)	Attainment		
Monoxide (CO)	8-Hour Average	9.0 ppm (10 mg/m³)	Attainment	9.0 ppm (10 mg/m³)	Attainment		
Nitrogen Dioxide	1-Hour Average	0.18 ppm (338 μg/m³)	Attainment	0.10 ppm (188 µg/m³)	Attainment		
(NO <sub>2</sub> )	Annual Arithmetic Mean	0.03 ppm (57 μg/m³)	Attainment	0.053 ppm (100 μg/m³)	Attainment		
	1-Hour Average	0.25 ppm (655 μg/m³)	Attainment	0.075 ppm (196 μg/m³)	Attainment		
Sulfur Dioxide (SO <sub>2</sub> )	24-Hour Average	0.04 ppm (105 μg/m³)	Attainment	0.14 ppm (365 μg/m³)	Attainment		
	Annual Arithmetic Mean			0.030 ppm (80 µg/m³)	Attainment		
Respirable Particulate	24-Hour Average	50 μg/m³	Nonattainment	150 μg/m <sup>3</sup>	Attainment (Maintenance)		
Matter (PM <sub>10</sub> )	Annual Arithmetic Mean	20 μg/m³	Nonattainment				
Fine Particulate	24-Hour Average			35 μg/m <sup>3</sup>	Nonattainment		
Matter (PM <sub>2.5</sub> )	Annual Arithmetic Mean	12 μg/m³	Nonattainment	12.0 μg/m <sup>3</sup>	Nonattainment		
	30-day Average	1.5 μg/m <sup>3</sup>	Attainment				
Lead (Pb)	Calendar Quarter			1.5 μg/m <sup>3</sup>	Unclassified/ Attainment		
` '	Rolling 3-Month Average			0.15 μg/m <sup>3</sup>	Unclassified/ Attainment		
Sulfates	24-Hour Average	25 μg/m <sup>3</sup>	Attainment				
Hydrogen Sulfide	1-Hour Average	0.03 ppm (42 μg/m³)	Attainment	No Federa	al Standards		
Vinyl Chloride	24-Hour Average	0.01 ppm (26 μg/m³)	Attainment				

CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million; μg/m³ = micrograms per cubic meter.

SOURCE: SCAQMD, NAAQS and CAAQS Attainment Status for South Coast Air Basin, January 2023.

#### State

Air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). The CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts at the regional and local levels. The CCAA requires all areas of the state to achieve and maintain the CAAQS by the earliest feasible date, which is determined in the most recent SIP based on existing emissions and reasonably foreseeable control measures that will be implemented in the future. The CAAQS are also summarized in **Table 1**, which also presents the attainment status designations for the Los Angeles County portion of the South Coast Air Basin (SCAB). The CARB's statewide comprehensive air toxics program was established in the early 1980's. The Toxic Air Contaminant Identification and Control Act created California's program to reduce exposure to air toxics. Under the Toxic Air Contaminant Identification and Control Act, the CARB is required to prioritize the identification and control of air toxics emissions. In selecting substances for review, the CARB must consider criteria relating to the risk of harm to public health, such as amount or potential amount of emissions, manner of and exposure to usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community.

#### Regional

The 1977 Lewis Air Quality Management Act established the South Coast Air Quality Management District (SCAQMD) in order to coordinate air quality planning efforts throughout Southern California. The SCAQMD has jurisdiction over a total area of 10,743 square miles, consisting of the SCAB—which comprises 6,745 square miles including Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties—and the Riverside County portion of the Salton Sea and Mojave Desert Air Basins. The proposed project would be located in the City of Long Beach, which is situated in the SCAB portion of Los Angeles County and is within the jurisdiction of the SCAQMD. The SCAQMD is tasked with preparing regional programs and policies designed to improve air quality within the SCAB, which are assessed and published in the form of the Air Quality Management Plan (AQMP). The current adopted publication is the 2022 AQMP, which is intended to serve as a regional blueprint for achieving the federal air quality standards and healthy air.

The SCAQMD has also established various rules to manage and improve air quality in the SCAB. The proposed project proponent would comply with all applicable SCAQMD Rules and Regulations pertaining to construction and future proposed project operations; including, but not limited to:

- Rule 402 (Nuisance) states that a person should not emit air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- Rule 403 (Fugitive Dust) controls fugitive dust through implementation of various best management practices (BMPs) related to equipment and vehicle operations during construction activities. The BMPs are summarized by source type under Regulatory Compliance Measure (RCM-AQ-2) below.
- Rule 1113 (Architectural Coatings) sets regulatory limits on the volatile organic compound (VOC) content of various architectural coatings for use in the SCAQMD jurisdiction.

## Regulatory Compliance Measures

During construction of the proposed project, the eventual contractor(s) would be subject to certain Regulatory Compliance Measures (RCMs) established to minimize emissions of dust and other pollutants from sources involved in construction activities. The following air quality RCMs would be enforced during active construction:

#### RCM-AQ-1

**SCAQMD Rule 401 (Visible Emissions):** A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree equal to or greater than smoke designated as meeting No. 1 on the Ringelmann Chart.

#### RCM-AQ-2

**SCAQMD Rule 402 (Public Nuisance):** A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

#### RCM-AQ-3

**SCAQMD Rule 403 (Fugitive Dust):** During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust-preventative measures by using the following BMPs:

- <u>Backfilling</u>: Backfill material stabilization when actively handling or inactive and stabilize soil at completion of activity.
- <u>Clearing/Grubbing</u>: Maintain stability of soil through watering of site prior to, during, and after all clearing/grubbing activities.
- <u>Cut and Fill</u>: Pre-water soils prior to cut and fill activities using water trucks; stabilize soil during and after activities.
- <u>Debris Hauling</u>: All trucks hauling dirt, sand, soil, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of 12 inches.
- <u>Demolition Activities</u>: Prohibit demolition activities when wind speeds exceed 25 mph; apply water to disturbed soils after demolition is completed or at the end of each day of cleanup.
- <u>Disturbed Soil</u>: Stabilize disturbed soil throughout the construction site by limiting vehicular traffic and disturbance on soil where possible and applying water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes (Rule 401 Visible Emissions).
- <u>Disturbed Surface Areas</u>: Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface; apply water at three-hour intervals to at least 80 percent of the un-stabilized area.

- <u>Earth-Moving Activities</u>: Pre-apply water to depth of proposed cuts and reapply as necessary to maintain soils in a damp condition and to ensure that visible dust plumes do not exceed 100 feet in any direction.
- <u>Importing/Exporting of Bulk Materials</u>: Stabilize material with tarps or other suitable enclosures on trucks while loading/unloading to reduce fugitive dust emissions and maintain at least six inches of freeboard on haul vehicle; provide water during loading/unloading to prevent dust plumes.
- <u>Staging Areas and Unpaved Roads</u>: Stabilize surface areas and limit vehicle speeds to 15 miles per hour.
- <u>Stockpiles/Bulk Material Handling</u>: stabilize stockpiled materials with intermittent watering and limit stockpiles to eight feet in height within 100 yards of off-site occupied buildings.
- <u>Trenching</u>: Stabilize surface soils with pre-watering where trencher or excavator and support equipment will operate; wash mud and soils from equipment at completion of activities.

#### RCM-AQ-4

**State Vehicle Code Section 23114:** All trucks that are to haul excavated or graded material shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

#### RCM-AQ-5

**Miscellaneous Local Measures:** Prior to approval of the project plans and specifications, the City shall confirm that the construction bid packages specify:

- To the extent feasible, construction/building materials shall be composed of prepainted materials;
- Contractors shall use high-volume, low-pressure paint applicators with a minimum transfer efficiency of at least 50 percent; and,
- Coatings and solvents that will be utilized shall have a volatile organic compound (VOC) content lower than required under SCAQMD Rule 1113.

## **Existing Setting**

#### **Geography and Climatology**

The SCAB is subject to high levels of air pollution due to the immense magnitude of emissions sources and the combination of topography, low mean atmospheric mixing height, and abundant sunshine. Although the SCAB has a semiarid climate, air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The mountains and hills surrounding the SCAB contribute to the variation of rainfall, temperature, and winds throughout the region. During the spring and early summer, pollution produced during any one day is typically blown out of the SCAB through mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. The vertical dispersion of air pollutants in the SCAB is limited by temperature inversions in the atmosphere close to the Earth's surface. The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants become more concentrated in urbanized areas with pollution sources of greater magnitude.

#### **Local Air Quality**

Air quality within the SCAB region is characterized by concentrations of air pollutants measured at 37 monitoring stations located throughout the SCAQMD jurisdiction. The SCAB is divided geographically into 38 source receptors areas (SRAs), each of which contains an air quality monitoring station excluding SRA 7. The SRA boundaries were drawn based on proximity to the nearest air monitoring station, the local emission inventories, and surrounding topography. The proposed project is in SRA 4 (South Coastal Los Angeles County). Local air quality at the project site is best characterized by concentrations of pollutants recorded at the Long Beach – Hudson (2425 Webster Avenue) air monitoring station that was operated by the SCAQMD until its closure at the end of 2019 and subsequent replacement with the Long Beach – Signal Hill monitoring station. The Long-Beach – Hudson station measured concentrations of hourly average and eighthour average O<sub>3</sub>, hourly NO<sub>2</sub>, one-hour and eight-hour CO, and 24-hour average PM<sub>10</sub>. Concentrations of PM<sub>2.5</sub> are supplemented with data from the nearby South Long Beach (1305 East Pacific Coast Highway) monitoring station.

**Table 2** presents a summary of the air monitoring concentrations collected at the Long Beach – Hudson and South Long Beach stations for the most recent four years of published data. Ambient concentrations of O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> exceeded the associated NAAQS and CAAQS numerous times over the three-year period between from 2018 to 2021 (Year 2022 data has not been published by the SCAQMD or CARB). The data demonstrate the ongoing challenges that the region faces with regards to improving air quality and bringing the SCAB into attainment of the federal and state standards.

Pollutant	TABLE 2: S	SUMMARY OF AMBIENT AIR Q	UALITY DATA IN THE PROJ	ECT AR	EA		
State Standard: 0.090 ppm   Frequency Std. Exceeded   0   0   4   0   0   0   4   0   0   0	Pollutant	Air Quality Standards	Project Area Statistics	2018	2019	2020	2021
Nitrogen Dioxide (NO2)   State Standard: 0.18 ppm   Maximum 8-hr Concentration Dioxide (NO2)   State Standard: 0.18 ppm   Maximum 1-hr Concentration Prequency Std. Exceeded   0		1-hr Average (ppm)	Maximum 1-hr Concentration	0.074	0.074	0.105	0.086
Sate Standard: 0.070 ppm   Maximum 8-hr Concentration   0.063   0.064   0.083   0.064   0   0   0   4   0   0   0   0   0	-	State Standard: 0.090 ppm	Frequency Std. Exceeded	0	0	4	0
Nitrogen Dioxide (NO₂)   State Standard: 0.18 ppm National Standard: 0.19 ppm National Standard: 0.10 ppm   State Standard: 20.0 ppm National Standard: 35.0 ppm National Standard: 9.0 ppm National Standard: 9.0 ppm National Standard: 9.0 ppm National Standard: 9.0 ppm National Standard: 0.25 ppm National Standard: 0.10 ppm National Standard: 9.0 ppm National Standard: 9.0 ppm National Standard: 0.10 ppm National Standard: 0.10 ppm National Standard: 9.0 ppm National Standa	(03)	8-hr Average (ppm)	Maximum 8-hr Concentration	0.063	0.064	0.083	0.064
State Standard: 0.18 ppm		State Standard: 0.070 ppm	Frequency Std. Exceeded	0	0	4	0
Dioxide (NO₂)   State Standard: 0.18 ppm National Standard: 0.10 ppm   Frequency Std. Exceeded   0   0   0   0   0   0   0   0   0	Nitrogen	1-hr Average (ppm)	Maximum 1-hr Concentration	0.085	0.072	0.075	0.059
1-hr Average (ppm)   State Standard: 20.0 ppm   National Standard: 9.0 ppm   Prequency Std. Exceeded   0	Dioxide	State Standard: 0.18 ppm	Frequency Std. Exceeded	0	0	0	0
State Standard: 20.0 ppm   National Standard: 35.0 ppm   State Standard: 35.0 ppm   National Standard: 35.0 ppm   State Standard: 35.0 ppm   State Standard: 9.0 ppm   National Standard: 9.	(NO <sub>2</sub> )	National Standard: 0.10 ppm	Frequency Std. Exceeded	0	0	0	0
Carbon Monoxide (CO)         National Standard: 35.0 ppm         Frequency Std. Exceeded         0 <t< td=""><td></td><td>1-hr Average (ppm)</td><td>Maximum 1-hr Concentration</td><td>4.7</td><td>3.0</td><td></td><td></td></t<>		1-hr Average (ppm)	Maximum 1-hr Concentration	4.7	3.0		
National Standard: 9.0 ppm   Frequency Std. Exceeded   0   0   0   0   0		State Standard: 20.0 ppm	Frequency Std. Exceeded	0	0	Z	Z
National Standard: 9.0 ppm   Frequency Std. Exceeded   0   0   0   0   0	_	National Standard: 35.0 ppm	Frequency Std. Exceeded	0	0	ot Mon	ot Mon
National Standard: 9.0 ppm   Frequency Std. Exceeded   0   0   0   0   0	(CO)	8-hr Average (ppm)	Maximum 8-hr Concentration	2.1	2.1	litor	iitor
Sulfur Dioxide (SO <sub>2</sub> )		State Standard: 9.0 ppm	Frequency Std. Exceeded	0	0	e d	ed
Respirable Particulate Matter (PM <sub>10</sub> )   State Standard: 150 μg/m³   National Standard: 20 μg/m³   Annual Std. Exceeded   1 2 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		National Standard: 9.0 ppm	Frequency Std. Exceeded	0	0		
Respirable Particulate Matter (PM10)  State Standard: 50 $\mu$ g/m³ National Standard: 150 $\mu$ g/m³ State Standard: 150 $\mu$ g/m³ Annual Average ( $\mu$ g/m³) State Standard: 20 $\mu$ g/m³  Frequency Std. Exceeded  1 2 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dioxide	State Standard: 0.25 ppm	Frequency Std. Exceeded	0	0	Not Monitored	Not Monitored
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		24-hr Average (µg/m³)	Maximum 24-hr Concentration	55.7	72.7	68.3	48.7
Particulate Matter (PM $_{10}$ )  Annual Average ( $\mu$ g/m $^3$ ) State Standard: 20 $\mu$ g/m $^3$ Annual Std. Exceeded  Annual Average ( $\mu$ g/m $^3$ )  National Standard: 35 $\mu$ g/m $^3$ Annual Average ( $\mu$ g/m $^3$ )  State Standard: 12 $\mu$ g/m $^3$ Annual Std. Exceeded  No  No  No	Resnirable	State Standard: 50 µg/m³	Frequency Std. Exceeded	1	2	3	0
Fine Particulate Matter (PM <sub>2.5</sub> )         Annual Average (μg/m³)         Annual Avg. Concentration         24.5         21.8         26.9         23.6           Annual Std. Exceeded?         Yes         Yes <td< td=""><td>Particulate</td><td>National Standard: 150 μg/m<sup>3</sup></td><td>Frequency Std. Exceeded</td><td>0</td><td>0</td><td>0</td><td>0</td></td<>	Particulate	National Standard: 150 μg/m <sup>3</sup>	Frequency Std. Exceeded	0	0	0	0
Concentration   Fine Particulate   Matter (PM <sub>2.5</sub> )   State Standard: 12 μg/m³   State Standard: 12 μg/m³   Annual Std. Exceeded   To so state Standard: 12 μg/m³   Annual Std. Exceeded   To so state Standard: 12 μg/m³   Annual Std. Exceeded   To so state Standard: 12 μg/m³   Annual Std. Exceeded   To so state Standard: 12 μg/m³   Annual Avg. Concentration   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 13 μg/m³   Annual Std. Exceeded   To so state Standard: 14 μg/m³   Annual Std. Exceeded   To so state Standard: 14 μg/m³   Annual Std. Exceeded   To so state Standard: 14 μg/m³   Annual Std. Exceeded   To so state Standard: 14 μg/m³   Annual Std. Exceeded   To so state Standard: 14 μg/m³   Annual Std. Exceeded   To so state Standard: 15 μg/m³   To so state Standa	(PM <sub>10</sub> )	Annual Average (µg/m³)	Annual Avg. Concentration	24.5	21.8	26.9	23.6
Fine Particulate Matter (PM <sub>2.5</sub> )  National Standard: 35 μg/m³ Frequency Std. Exceeded 7 0 10 4  Annual Average (μg/m³) Annual Avg. Concentration 11.6 9.2 12.2 11.4  Annual Std. Exceeded? No No Yes No		State Standard: 20 µg/m³	•	Yes	Yes	Yes	Yes
Particulate Matter (PM <sub>2.5</sub> )  State Standard: 12 µg/m³  Annual Avg. Concentration 11.6  9.2  12.2  11.4  Annual Std. Exceeded?  No  No  Yes  No		24-hr Average (μg/m³)	Maximum 24-hr Concentration	77.3	30.6	63.7	42.9
Matter (PM2.5)Annual Average (μg/m³)Annual Avg. Concentration11.69.212.211.4State Standard: 12 μg/m³Annual Std. Exceeded?NoNoYesNo		National Standard: 35 μg/m³	Frequency Std. Exceeded	7	0	10	4
State Standard. 12 pg/ff Affidar Std. Exceeded: No No Tes No	Matter	<u>Annual Average (μg/m³)</u>	Annual Avg. Concentration	11.6	9.2	12.2	11.4
National Standard: 12 µg/m³ Annual Std. Exceeded? No No Yes No	(PM <sub>2.5</sub> )	State Standard: 12 µg/m³	Annual Std. Exceeded?	No	No	Yes	No
		National Standard: 12 μg/m³	Annual Std. Exceeded?	No	No	Yes	No

SOURCE: SCAQMD, Historical Data by Year – Air Quality Data Tables (2018, 2019, 2020, and 2021), https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year, accessed January 4, 2022; CARB, iADAM: Air Quality Data Statistics – Top 4 Summary, https://www.arb.ca.gov/adam/topfour/topfourdisplay.php, accessed January 4, 2022.

#### **Sensitive Receptors**

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The CARB has identified the following groups who are most likely to experience adverse health effects due to exposure to air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, land uses that constitute sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The SCAQMD has established 500 meters (1,640 feet) as the distance for assessing localized air quality impacts. Sensitive receptors within 500 meters of the project site include live aboard boats located approximately 100 feet from the project site and Shoreline Aquatic Park located approximately 350 feet (100 meters) to the west. There are additional small parks near the project site, although they are not considered sensitive air quality receptors due to lack of recreational space and the absence of playgrounds.

## **Significance Thresholds**

This Air Quality Assessment was undertaken to determine whether construction or operation of the proposed project would have the potential to result in significant environmental impacts in the context of the Appendix G Environmental Checklist criteria of the CEQA Statute and Guidelines. Implementation of the proposed project may result in a significant environmental impact related to air quality if the proposed project would:

- a) Conflict with or obstruct implementation of the applicable air quality plan;
- b) 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;
- c) Expose sensitive receptors to substantial pollutant concentrations; and/or
- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD published a CEQA Air Quality Handbook to guide air quality assessments for CEQA projects within its jurisdiction. SCAQMD methodologies recommend that air pollutant emissions be analyzed in both regional and local contexts. Regional emissions refer to all emissions that would be associated with construction and operation of a project, while localized emissions refer to only those emissions that would be produced by sources located on the project site. To assist in the assessment of air pollutant emissions under impact criteria a), b), and c) above, the SCAQMD established maximum daily threshold values for air pollutant emissions from CEQA projects within the SCAB. The mass daily thresholds were derived using regional emissions modeling techniques to prevent the occurrence of air quality violations that would obstruct implementation of the regional AQMP and hinder efforts to improve regional air quality.

<sup>&</sup>lt;sup>1</sup>SCAQMD, CEQA Air Quality Handbook (Version 3), revised 2001.

**Table 3** presents the SCAQMD mass daily air quality significance thresholds for regional and localized emissions of regulated pollutants resulting from construction activities.<sup>2</sup> The localized significance thresholds (LSTs) are quantitative screening values specific to SCAQMD SRA 4—Southwest Coastal Los Angeles County—applicable to a one-acre construction disturbance area within 25 meters of sensitive receptors and were obtained from the SCAQMD LST guidance document.<sup>3,4</sup> The LST values were derived from regionally-specific modeling of emissions and are designed to prevent localized pollutant concentrations from exceeding applicable ambient air quality standards at sensitive land uses near construction sites.

TABLE 3: SCAQMD AIR QUA	LITY SIGNIF	FICANCE TH	HRESHOLD	S – MASS D	AILY EMIS	SIONS
Pollutant	voc	NO <sub>X</sub>	СО	SO <sub>X</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
CONSTRUCTION						
Regional Threshold (lbs./day)	75	100	550	150	150	55
Localized Threshold (lbs./day)		57	585		4	3
OPERATIONS						
Regional Threshold (lbs./day)	55	55	550	150	150	55
Localized Threshold (lbs./day)		57	585		1	1
Note: lbs./day = pounds per day SOURCE: SCAQMD, 2009 and 2023.						•

## Methodology

Construction emissions are estimated using the latest California Emissions Estimator Model (CalEEMod, Version 2022.1.1.3). Emission factors applicable to the Los Angeles County portion of the SCAB were used in conjunction with conservative estimates of equipment activity, worker trips, fugitive dust generation, and material hauling trips to estimate maximum daily emissions during each construction phase. Construction emissions were estimated using detailed equipment inventories and construction scheduling information provided by the engineering team combined with emissions factors from the EMFAC and OFFROAD models that are built into the CalEEMod program.

The proposed project would not include a significant new source of permanent emissions. The proposed project consists of a renovation of commercial/restaurant uses within the Shoreline Village. No new parcels would be developed, and no additional net square footage would be added to current parcels. The proposed project is not anticipated to generate new vehicle trips. Therefore, operational emissions are qualitatively assessed in the impact assessment.

<sup>&</sup>lt;sup>2</sup>SCAQMD, SCAQMD Air Quality Significance Thresholds – Mass Daily Thresholds, March 2015.

<sup>&</sup>lt;sup>3</sup>SCAQMD, Final Localized Significance Threshold Methodology Appendix C Mass Rate Lookup Tables, October 21, 2009.

<sup>&</sup>lt;sup>4</sup>SCAQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2008.

## **Impact Assessment**

# a) Would the proposed project conflict with or obstruct implementation of the applicable air quality plan? (Less-Than-Significant Impact)

The following analysis addresses the consistency with applicable SCAQMD and SCAG policies, including the AQMP and growth projections within the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with federal and State air quality standards on the designated SIP timeline. The consistency determination at the environmental review stage in the planning process plays an essential role in local agency project review by linking local planning to the AQMP. The SCAQMD acknowledges that generally, only new or amended General Plan Elements, Specific Plans, and significant projects need to undergo a comprehensive consistency review. This is because the AQMP control strategy is based on regional and local growth projections from General Plans and metropolitan planning organizations (MPOs). As such, projects consistent with the local General Plans and underlying regional and local growth projections are considered consistent with the AQMP.

Consistency with the AQMP means that a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and state ambient air quality standards. In accordance with the procedures established in the SCAQMD CEQA Air Quality Handbook, the following criteria are required to be addressed in order to determine the consistency with applicable SCAQMD and SCAG policies:

- Would the proposed project result in any of the following?
  - An increase in the frequency or severity of existing air quality violations;
  - Cause or contribute to new air quality violations; or,
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AOMP.
- Would the proposed project exceed the assumptions utilized in preparing the AQMP?
  - Is the project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the project include air quality mitigation measures; or,
  - To what extent is project development consistent with the AQMP land use policies?

The first indicator is assessed by comparing emissions of air pollutants that would be produced by construction and operation of the proposed project to the SCAQMD significance thresholds, both on regional and localized scales. The air quality significance thresholds were designed to prevent the occurrence and exacerbation of air quality violations resulting from construction and operation of individual CEQA projects in the context of existing ambient air quality conditions. The second indicator is assessed by determining consistency of permanent operations with population, housing, and employment assumptions that were used in the development of the AQMP and the RTP/SCS.

Shoreline Village Renovation Project April 12, 2023 Page 13

#### Construction

Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips by construction workers and haul trucks traveling to and from the project site. Fugitive dust emissions would primarily result from site preparation (e.g., demolition and grading) activities. NO<sub>X</sub> emissions would predominantly result from the use of construction equipment and haul truck trips. The assessment of construction air quality impacts considers all of these emissions sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. It is mandatory for all construction projects in the SCAB to comply with SCAQMD Rule 403 for Fugitive Dust.

Rule 403 control requirements include best management practices to prevent the generation of visible dust plumes. Best management practices include, but are not limited to, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system or other control measures to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with the provisions and best management practices propagated by Rule 403—such as the application of water as a dust suppressant to exposed stockpiles and disturbed ground surfaces—would reduce regional fugitive dust PM<sub>10</sub> and PM<sub>2.5</sub> emissions associated with construction activities by approximately 61 percent.

**Table 4** shows the maximum unmitigated daily emissions that would be generated by sources involved in construction for each activity, differentiated by source location either on-site of off-site to facilitate the analysis of both regional and localized emissions. The potential for maximum daily emissions was considered individually for each phase in addition to combined emissions from new construction and renovation activities. Maximum daily emissions of all air pollutants would remain below all applicable regional SCAQMD thresholds during construction of the proposed project, and air quality impacts would be less than significant.

		Daily E	missions (I	Pounds Per	Day)	
Phase	VOC	NOx	СО	SOx	PM <sub>10</sub>	PM <sub>2</sub>
DEMOLITION						
On-Site Emissions	2.4	23.3	20.1	<0.1	1.9	,
Off-Site Emissions	0.3	1.3	4.2	<0.1	1.0	(
Total	2.7	24.6	24.3	<0.1	2.9	
EXCAVATION						
On-Site Emissions	1.9	17.3	17.2	<0.1	3.9	:
Off-Site Emissions	0.3	2.2	4.5	<0.1	1.2	(
Total	2.2	19.5	21.7	<0.1	5.1	
SITE PREPARATION/GRADING						
On-Site Emissions	1.4	13.3	13.2	<0.1	3.2	
Off-Site Emissions	0.3	0.7	4.0	<0.1	0.9	(
Total	1.7	14.0	17.2	<0.1	4.0	
NEW BUILDING CONSTRUCTION						
On-Site Emissions	1.0	9.0	13.9	<0.1	0.4	(
Off-Site Emissions	0.3	1.4	4.7	<0.1	1.1	(
Total	1.3	10.4	18.0	<0.1	1.4	
RENOVATION						
On-Site Emissions	0.3	3.4	6.1	<0.1	0.1	
Off-Site Emissions	0.3	1.0	4.5	<0.1	1.0	
Total	0.6	4.4	10.6	<0.1	1.1	
NEW BUILDING CONSTRUCTION + REN	OVATION					
On-Site Emissions	1.3	12.4	20.0	<0.1	0.5	
Off-Site Emissions	0.6	2.5	9.2	<0.1	2.0	(
Total	1.9	14.8	29.2	<0.1	2.5	
PAVING						
On-Site Emissions	1.1	5.8	7.5	<0.1	0.3	
Off-Site Emissions	0.2	0.4	4.0	<0.1	0.8	(
Total	1.3	6.2	10.9	<0.1	1.1	
ARCHITECTURAL COATING						
On-Site Emissions	3.6	2.4	3.0	<0.1	0.1	
Off-Site Emissions	0.2	0.3	3.9	<0.1	0.8	(
Total	3.9	2.7	7.0	<0.1	0.9	
REGIONAL ANALYSIS						
Maximum Regional Daily Emissions	3.9	24.6	29.2	<0.1	5.1	
Regional Significance Threshold	75	100	550	150	150	
Exceed Regional Threshold?	No	No	No	No	No	
OCALIZED ANALYSIS						
Maximum Localized Daily Emissions		23.3	20.1		3.9	
Localized Significance Threshold		57	585		4	
Exceed Localized Threshold?		No	No		No	

### **Operations**

The proposed project would not include a new significant source of permanent emissions. Most importantly for air pollutant emissions, the proposed project would not generate new vehicle trips beyond existing traffic volumes. Other common sources of permanent emissions associated with land use development include area source emissions such as consumer product use (i.e., cleaning supplies). Indirect source emissions during operations commonly include energy consumption such as natural gas use associated with space heating, water heating, and stoves, as well as electricity for lighting and appliances. The replacement of aging buildings would improve the existing energy infrastructure leading to a decrease in on-site energy consumption. New on-site drought resistant landscaping would reduce exiting water use and associated indirect energy consumption used to transport water to the project site. New buildings would be LEED certified, which would improve energy efficiency from the existing uses resulting in a reduction of indirect energy-related emissions. The proposed project would not generate more permanent emissions than the existing condition. Operational emissions would not exceed SCAQMD thresholds, and air quality impacts would be less than significant.

The second consistency criterion requires that the proposed project not exceed the assumptions in the AQMP, thereby rendering the regional emissions inventory inaccurate. Implementation of the proposed project would not introduce new housing and related population to the City of Long Beach. The renovation project would not require a substantial number of new employees at the project site. The proposed project would not be considered a significant project by the SCAQMD as it would not affect growth projections incorporated into the ambient air quality standard attainment timelines. The proposed project would not have any potential to result in growth that would exceed the projections incorporated into the AQMP or the RTP/SCS, and air quality impacts would be less than significant.

#### **Mitigation Measures**

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

b) Would the proposed 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? (Less-Than-Significant Impact)

The SCAB is currently designated nonattainment for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> under the State standards and nonattainment for O<sub>3</sub> and PM<sub>2.5</sub> under the federal standards. Therefore, a project may result in a cumulatively considerable air quality impact under this criterion if daily emissions of O<sub>3</sub> precursors (VOC and NO<sub>X</sub>) or particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) exceed applicable air quality thresholds of significance established by the SCAQMD. The SCAQMD designed the significance thresholds to prevent projects from exceeding the ambient air quality standards and potentially resulting in air quality violations. The SCAQMD suggests that if any quantitative air quality significance threshold is exceeded by an individual project during construction activities or operation, that project is considered cumulatively considerable and would be required to implement effective and feasible mitigation measures to reduce air quality impacts.

Conversely, the SCAQMD propagates the guidance that if an individual project would not exceed the regional mass daily thresholds, then it is generally not considered to be cumulatively significant. This method of impact determination allows for the screening of individual projects that would not represent substantial new sources of emissions in the SCAB; it also serves to exclude smaller projects from the responsibility of identifying potentially concurrent new or proposed construction and operation emissions nearby since the incremental contribution to regional emissions is minor. As shown in **Table 4** above, implementation of the proposed project would not exceed any applicable SCAQMD regional mass daily thresholds during construction or

operation. Therefore, the proposed project would not generate cumulatively considerable emissions of ozone precursors or particulate matter and impacts would be less than significant.

#### **Mitigation Measures**

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

c) Would the proposed project expose sensitive receptors to substantial pollutant concentrations? (Less-Than-Significant Impact)

#### Construction

The use of heavy-duty construction equipment and haul trucks during construction activities would release diesel PM to the atmosphere through exhaust emissions. Diesel PM is a known carcinogen, and extended exposure to elevated concentrations of diesel PM can increase excess cancer risks in individuals. However, carcinogenic risks are typically assessed over timescales of several years to decades, as the carcinogenic dose response is cumulative in nature. Short-term exposures to diesel PM would have to involve extremely high concentrations in order to exceed the SCAQMD air quality significance threshold of 10 excess cancers per million. Construction of the proposed project is forecasted to last for approximately 18 months, and over the course of construction activities average diesel PM emissions from on-site equipment would be approximately 0.5 pounds per day. This magnitude of diesel PM emissions is a conservative estimate based on the assumed near-continuous operation of equipment during the workday, when in reality there may be considerable downtime throughout days of active construction. Emissions would be distributed across the construction site where equipment is active, and would be dispersed quickly due to the elevated atmospheric mixing height and higher wind speeds during the daytime. It is unlikely that diesel PM concentrations would reach levels of any public health concern at sensitive receptor locations in the project vicinity during the construction period, and diesel PM emissions would cease upon completion of construction activities. Therefore, the proposed project would result in a less-than-significant impact related to construction toxic air contaminants emissions.

#### **Operations**

The SCAQMD recommends that a health risk assessment be conducted for substantial sources of diesel PM emissions (e.g., truck stops and distribution facilities). The proposed project is not one that would generate a substantial number of heavy-duty truck trips within the region, such as a distribution warehouse. It is not anticipated that the proposed project would generate significant truck trips and no other sources of operational air toxic emissions have been identified at the project site. Therefore, the proposed project would not result in an impact related to operational pollutants.

#### Mitigation Measures

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

# d) Would the proposed project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (No Impact)

#### Construction

Odors are the only potential construction emissions other than the sources addressed above. Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site and would be temporary in nature and would not persist beyond the termination of construction activities. The proposed project would utilize standard construction techniques, and the odors would be typical of most construction sites and temporary in nature. In addition, as construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. The construction contractor will ensure that activities comply with SCAQMD Rules 401 (Visible Emissions) and 402 (Nuisance) to prevent the occurrence of public nuisances and visible dust plumes traveling off-site (RCM-AQ-1 and RCM-AQ-2). Therefore, the proposed project would result not result in an impact related to construction odors and other nuisances.

#### **Operations**

Odors are the only potential operational emissions other than the sources addressed above. Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The operations would comply with SCAQMD Rule 402, which would prohibit any air quality discharge that would be a nuisance or pose any harm to individuals of the public. Therefore, the proposed project would not result in a significant impact related to operational odors or other nuisances.

#### **Mitigation Measures**

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

## **References**

- California Air Pollution Control Officer's Association, *California Emissions Estimator Model (Version 2022.1) User's Guide*, April 2022.
- California Air Resources Board, *iADAM: Air Quality Data Statistics Top Four Summary*, https://www.arb.ca.gov/adam/topfour/topfourdisplay.php, accessed January 4, 2023.
- South Coast Air Quality Management District, CEQA Air Quality Handbook, (Version 3), revised 2001.
- South Coast Air Quality Management District, *Draft Guidance Document Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008.
- South Coast Air Quality Management District, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2013.
- South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology Appendix C Localized Significance Threshold Screening Tables*, October 21, 2009.
- South Coast Air Quality Management District, *Historical Data By Year (2018, 2019, 2020, 2021)*, available at https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year, accessed January 4, 2023.
- South Coast Air Quality Management District, NAAQS and CAAQS Attainment Status for South Coast Air Basin, October 2018.
- South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds, March 2023.
- Southern California Association of Governments, Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Adopted September 2020.

# **TECHNICAL APPENDIX**

California Emission Estimator Model (CalEEMod) Output Files

# Shoreline Village New Construction Detailed Report

## Table of Contents

- 1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year, Unmitigated
  - 2.3. Construction Emissions by Year, Mitigated
  - 2.4. Operations Emissions Compared Against Thresholds
  - 2.5. Operations Emissions by Sector, Unmitigated
  - 2.6. Operations Emissions by Sector, Mitigated
- 3. Construction Emissions Details
  - 3.1. Demolition (2024) Unmitigated
  - 3.2. Demolition (2024) Mitigated

- 3.3. Site Preparation (2024) Unmitigated
- 3.4. Site Preparation (2024) Mitigated
- 3.5. Grading (2024) Unmitigated
- 3.6. Grading (2024) Mitigated
- 3.7. Building Construction (2025) Unmitigated
- 3.8. Building Construction (2025) Mitigated
- 3.9. Building Construction (2026) Unmitigated
- 3.10. Building Construction (2026) Mitigated
- 3.11. Paving (2026) Unmitigated
- 3.12. Paving (2026) Mitigated
- 3.13. Architectural Coating (2026) Unmitigated
- 3.14. Architectural Coating (2026) Mitigated
- 4. Operations Emissions Details
  - 4.1. Mobile Emissions by Land Use
    - 4.1.1. Unmitigated
    - 4.1.2. Mitigated
  - 4.2. Energy

- 4.2.1. Electricity Emissions By Land Use Unmitigated
- 4.2.2. Electricity Emissions By Land Use Mitigated
- 4.2.3. Natural Gas Emissions By Land Use Unmitigated
- 4.2.4. Natural Gas Emissions By Land Use Mitigated
- 4.3. Area Emissions by Source
  - 4.3.2. Unmitigated
  - 4.3.1. Mitigated
- 4.4. Water Emissions by Land Use
  - 4.4.2. Unmitigated
  - 4.4.1. Mitigated
- 4.5. Waste Emissions by Land Use
  - 4.5.2. Unmitigated
  - 4.5.1. Mitigated
- 4.6. Refrigerant Emissions by Land Use
  - 4.6.1. Unmitigated
  - 4.6.2. Mitigated
- 4.7. Offroad Emissions By Equipment Type

- 4.7.1. Unmitigated
- 4.7.2. Mitigated
- 4.8. Stationary Emissions By Equipment Type
  - 4.8.1. Unmitigated
  - 4.8.2. Mitigated
- 4.9. User Defined Emissions By Equipment Type
  - 4.9.1. Unmitigated
  - 4.9.2. Mitigated
- 4.10. Soil Carbon Accumulation By Vegetation Type
  - 4.10.1. Soil Carbon Accumulation By Vegetation Type Unmitigated
  - 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type Unmitigated
  - 4.10.3. Avoided and Sequestered Emissions by Species Unmitigated
  - 4.10.4. Soil Carbon Accumulation By Vegetation Type Mitigated
  - 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type Mitigated
  - 4.10.6. Avoided and Sequestered Emissions by Species Mitigated
- 5. Activity Data
- 5.1. Construction Schedule

- 5.2. Off-Road Equipment
  - 5.2.1. Unmitigated
  - 5.2.2. Mitigated
- 5.3. Construction Vehicles
  - 5.3.1. Unmitigated
  - 5.3.2. Mitigated
- 5.4. Vehicles
  - 5.4.1. Construction Vehicle Control Strategies
- 5.5. Architectural Coatings
- 5.6. Dust Mitigation
  - 5.6.1. Construction Earthmoving Activities
  - 5.6.2. Construction Earthmoving Control Strategies
- 5.7. Construction Paving
- 5.8. Construction Electricity Consumption and Emissions Factors
- 5.9. Operational Mobile Sources
  - 5.9.1. Unmitigated
  - 5.9.2. Mitigated

## 5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

## 5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

## 5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

## 5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

## 5.14. Operational Refrigeration and Air Conditioning Equipment

- 5.14.1. Unmitigated
- 5.14.2. Mitigated
- 5.15. Operational Off-Road Equipment
  - 5.15.1. Unmitigated
  - 5.15.2. Mitigated
- 5.16. Stationary Sources
  - 5.16.1. Emergency Generators and Fire Pumps
  - 5.16.2. Process Boilers
- 5.17. User Defined
- 5.18. Vegetation
  - 5.18.1. Land Use Change
    - 5.18.1.1. Unmitigated
    - 5.18.1.2. Mitigated
  - 5.18.1. Biomass Cover Type
    - 5.18.1.1. Unmitigated
    - 5.18.1.2. Mitigated
  - 5.18.2. Sequestration

- 5.18.2.1. Unmitigated
- 5.18.2.2. Mitigated
- 6. Climate Risk Detailed Report
  - 6.1. Climate Risk Summary
  - 6.2. Initial Climate Risk Scores
  - 6.3. Adjusted Climate Risk Scores
  - 6.4. Climate Risk Reduction Measures
- 7. Health and Equity Details
  - 7.1. CalEnviroScreen 4.0 Scores
  - 7.2. Healthy Places Index Scores
  - 7.3. Overall Health & Equity Scores
  - 7.4. Health & Equity Measures
  - 7.5. Evaluation Scorecard
  - 7.6. Health & Equity Custom Measures
- 8. User Changes to Default Data

# 1. Basic Project Information

# 1.1. Basic Project Information

Data Field	Value
Project Name	Shoreline Village New Construction
Lead Agency	City of Long Beach
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.30
Precipitation (days)	18.4
Location	33.760544566228546, -118.19005655219982
County	Los Angeles-South Coast
City	Long Beach
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4773
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Long Beach Gas & Oil

# 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
Regional Shopping Center	5.52	1000sqft	0.13	5,519	0.00	_	_	_
Enclosed Parking with Elevator	70.5	1000sqft	0.85	70,540	0.00	_	_	_

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

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Transportation	T-33*	Locate Project near Bike Path/Bike Lane
Transportation	T-34*	Provide Bike Parking
Area Sources	AS-2	Use Low-VOC Paints

<sup>\*</sup> Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

# 2. Emissions Summary

# 2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	_	_	_	_	_	_	-	-	_	_	_	_	_	_	_
Unmit.	1.57	3.85	10.3	18.6	0.03	0.36	1.04	1.40	0.33	0.25	0.58	_	4,254	4,254	0.17	0.18	5.64	4,319
Mit.	1.57	3.85	10.3	18.6	0.03	0.36	1.04	1.40	0.33	0.25	0.58	_	4,254	4,254	0.17	0.18	5.64	4,319
% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.22	2.69	24.5	24.3	0.04	1.02	4.27	5.09	0.94	1.66	2.41	_	4,950	4,950	0.22	0.28	0.17	5,039
Mit.	3.22	2.69	24.5	24.3	0.04	1.02	4.27	5.09	0.94	1.66	2.41	_	4,950	4,950	0.22	0.28	0.17	5,039
% Reduced	_	_	_	-	_	_	_	_	_	_	_	_	_	_	-	_	_	
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_

Unmit.	1.10	0.91	7.34	12.8	0.02	0.25	0.73	0.98	0.23	0.18	0.41	_	2,975	2,975	0.12	0.13	1.72	3,018
Mit.	1.10	0.91	7.34	12.8	0.02	0.25	0.73	0.98	0.23	0.18	0.41	_	2,975	2,975	0.12	0.13	1.72	3,018
% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.20	0.17	1.34	2.34	< 0.005	0.05	0.13	0.18	0.04	0.03	0.07	-	493	493	0.02	0.02	0.28	500
Mit.	0.20	0.17	1.34	2.34	< 0.005	0.05	0.13	0.18	0.04	0.03	0.07	_	493	493	0.02	0.02	0.28	500
% Reduced	_	_	_	_	_	_	-	_	_	_	_	_	_	_		_	_	_
Exceeds (Daily Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	75.0	100	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	-	_	_	_	_	_	_
Mit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Exceeds (Average Daily)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	75.0	100	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Mit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_

# 2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer (Max)																		

2025	1.57	1.30	10.3	18.6	0.03	0.36	1.04	1.40	0.33	0.25	0.58	_	4,254	4,254	0.17	0.18	5.64	4,319
2026	1.04	3.85	6.20	11.4	0.01	0.27	0.82	1.08	0.24	0.19	0.44	_	2,083	2,083	0.09	0.06	3.09	2,105
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	3.22	2.69	24.5	24.3	0.04	1.02	4.27	5.09	0.94	1.66	2.41	_	4,950	4,950	0.22	0.28	0.17	5,039
2025	1.56	1.30	10.4	18.0	0.03	0.36	1.04	1.40	0.33	0.25	0.58	_	4,212	4,212	0.18	0.18	0.15	4,271
2026	1.47	1.22	9.72	17.7	0.03	0.33	1.04	1.37	0.29	0.25	0.55	_	4,180	4,180	0.17	0.18	0.14	4,239
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.29	0.24	2.13	2.35	< 0.005	0.09	0.38	0.47	0.08	0.13	0.22	_	489	489	0.02	0.02	0.26	496
2025	1.10	0.91	7.34	12.8	0.02	0.25	0.73	0.98	0.23	0.18	0.41	_	2,975	2,975	0.12	0.13	1.72	3,018
2026	0.32	0.36	2.06	3.79	0.01	0.07	0.24	0.31	0.06	0.06	0.12	_	852	852	0.04	0.03	0.49	864
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.05	0.04	0.39	0.43	< 0.005	0.02	0.07	0.09	0.02	0.02	0.04	_	81.0	81.0	< 0.005	< 0.005	0.04	82.2
2025	0.20	0.17	1.34	2.34	< 0.005	0.05	0.13	0.18	0.04	0.03	0.07	_	493	493	0.02	0.02	0.28	500
2026	0.06	0.07	0.38	0.69	< 0.005	0.01	0.04	0.06	0.01	0.01	0.02	<u> </u>	141	141	0.01	0.01	0.08	143

# 2.3. Construction Emissions by Year, Mitigated

Year	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	1.57	1.30	10.3	18.6	0.03	0.36	1.04	1.40	0.33	0.25	0.58	_	4,254	4,254	0.17	0.18	5.64	4,319
2026	1.04	3.85	6.20	11.4	0.01	0.27	0.82	1.08	0.24	0.19	0.44	_	2,083	2,083	0.09	0.06	3.09	2,105
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	3.22	2.69	24.5	24.3	0.04	1.02	4.27	5.09	0.94	1.66	2.41	_	4,950	4,950	0.22	0.28	0.17	5,039

2025	1.56	1.30	10.4	18.0	0.03	0.36	1.04	1.40	0.33	0.25	0.58	_	4,212	4,212	0.18	0.18	0.15	4,271
2026	1.47	1.22	9.72	17.7	0.03	0.33	1.04	1.37	0.29	0.25	0.55	_	4,180	4,180	0.17	0.18	0.14	4,239
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.29	0.24	2.13	2.35	< 0.005	0.09	0.38	0.47	0.08	0.13	0.22	_	489	489	0.02	0.02	0.26	496
2025	1.10	0.91	7.34	12.8	0.02	0.25	0.73	0.98	0.23	0.18	0.41	_	2,975	2,975	0.12	0.13	1.72	3,018
2026	0.32	0.36	2.06	3.79	0.01	0.07	0.24	0.31	0.06	0.06	0.12	_	852	852	0.04	0.03	0.49	864
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.05	0.04	0.39	0.43	< 0.005	0.02	0.07	0.09	0.02	0.02	0.04	_	81.0	81.0	< 0.005	< 0.005	0.04	82.2
2025	0.20	0.17	1.34	2.34	< 0.005	0.05	0.13	0.18	0.04	0.03	0.07	_	493	493	0.02	0.02	0.28	500
2026	0.06	0.07	0.38	0.69	< 0.005	0.01	0.04	0.06	0.01	0.01	0.02	_	141	141	0.01	0.01	0.08	143

# 2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	СО				PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	-	-	-	_	_	_	_	_	_	_	_	_	_	-	_	_	_
Unmit.	0.59	0.68	0.04	3.32	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	3.91	325	329	0.42	0.01	0.03	341
Mit.	0.59	0.68	0.04	3.32	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	3.91	325	329	0.42	0.01	0.03	341
% Reduced	_	1%	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	-	_	-	_	_	_	-	_	_	_	_	_	_	-	_	_	_
Unmit.	< 0.005	0.14	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.91	312	316	0.42	0.01	0.03	328
Mit.	< 0.005	0.13	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.91	312	316	0.42	0.01	0.03	328
% Reduced	_	6%	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_

Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.40	0.51	0.03	2.27	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.91	321	325	0.42	0.01	0.03	337
Mit.	0.40	0.50	0.03	2.27	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.91	321	325	0.42	0.01	0.03	337
% Reduced	_	2%	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.07	0.09	0.01	0.41	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.65	53.1	53.8	0.07	< 0.005	< 0.005	55.8
Mit.	0.07	0.09	0.01	0.41	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.65	53.1	53.8	0.07	< 0.005	< 0.005	55.8
% Reduced	_	2%	_	-	_	_	_	_	_	_	-	_	_	_	_	_	_	_

# 2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.59	0.68	0.03	3.31	< 0.005	< 0.005	_	< 0.005	0.01	_	0.01	_	13.6	13.6	< 0.005	< 0.005	_	13.7
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	309	309	0.03	< 0.005	_	311
Water	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Waste	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Total	0.59	0.68	0.04	3.32	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	3.91	325	329	0.42	0.01	0.03	341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	_	0.14	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	309	309	0.03	< 0.005	_	311
Water	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Waste	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Total	< 0.005	0.14	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.91	312	316	0.42	0.01	0.03	328
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.40	0.51	0.02	2.27	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	9.32	9.32	< 0.005	< 0.005	_	9.35
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	309	309	0.03	< 0.005	_	311
Water	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Waste	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Total	0.40	0.51	0.03	2.27	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.91	321	325	0.42	0.01	0.03	337
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.07	0.09	< 0.005	0.41	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.54	1.54	< 0.005	< 0.005	_	1.55
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	51.2	51.2	< 0.005	< 0.005	_	51.4
Water	_	_	_	_	_	_	_	_	_	_	_	0.13	0.44	0.57	0.01	< 0.005	_	1.00
Waste	_	_	_	_	_	_	_	_	_	_	_	0.52	0.00	0.52	0.05	0.00	_	1.81
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	< 0.005	< 0.005
Total	0.07	0.09	0.01	0.41	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.65	53.1	53.8	0.07	< 0.005	< 0.005	55.8

# 2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.59	0.68	0.03	3.31	< 0.005	< 0.005	_	< 0.005	0.01	_	0.01	_	13.6	13.6	< 0.005	< 0.005	_	13.7
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	309	309	0.03	< 0.005	_	311
Nater	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Vaste	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Total	0.59	0.68	0.04	3.32	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	3.91	325	329	0.42	0.01	0.03	341
Daily, Winter (Max)	_	_	_	-	-	_	-	_	_	_	-	-	_	_	_	_	_	_
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	_	0.13	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	309	309	0.03	< 0.005	_	311
Nater	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Waste	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Total	< 0.005	0.13	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.91	312	316	0.42	0.01	0.03	328
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.40	0.50	0.02	2.27	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	9.32	9.32	< 0.005	< 0.005	_	9.35
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	309	309	0.03	< 0.005	_	311
Vater	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Vaste	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03

Total	0.40	0.50	0.03	2.27	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.91	321	325	0.42	0.01	0.03	337
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.07	0.09	< 0.005	0.41	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.54	1.54	< 0.005	< 0.005	_	1.55
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	51.2	51.2	< 0.005	< 0.005	_	51.4
Water	_	_	_	_	_	_	_	_	_	_	_	0.13	0.44	0.57	0.01	< 0.005	_	1.00
Waste	_	_	_	_	_	_	_	_	_	_	_	0.52	0.00	0.52	0.05	0.00	_	1.81
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	0.07	0.09	0.01	0.41	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.65	53.1	53.8	0.07	< 0.005	< 0.005	55.8

# 3. Construction Emissions Details

## 3.1. Demolition (2024) - Unmitigated

	TOG	ROG	NOx	СО				PM10T				BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		2.40	23.3	20.1	0.03	1.01	_	1.01	0.93	_	0.93	_	3,218	3,218	0.13	0.03	_	3,229
Demolitio n	_	_	_	_	_	_	0.54	0.54	_	0.08	0.08	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	_	6.95	6.95	< 0.005	< 0.005	< 0.005	7.32
Average Daily	_		_	_	_	_	_	_	_	_	_	_	_	_		_	_	_

Off-Road Equipment		0.07	0.64	0.55	< 0.005	0.03	_	0.03	0.03	_	0.03	_	88.2	88.2	< 0.005	< 0.005	_	88.5
Demolitio n	_	_	_	_	_	_	0.01	0.01	_	< 0.005	< 0.005	_	_	_	_	_	_	-
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment		0.01	0.12	0.10	< 0.005	0.01	_	0.01	< 0.005	_	< 0.005	_	14.6	14.6	< 0.005	< 0.005	_	14.6
Demolitio n	_	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	-	_	-	_	_	_	_
Daily, Winter (Max)	_	_	_	_	-	-	_	-	_	_	_	_	_	_	_	_	_	_
Worker	0.30	0.27	0.34	3.83	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	803	803	0.04	0.03	0.09	813
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	0.01	0.92	0.34	< 0.005	0.01	0.19	0.19	0.01	0.05	0.06	_	705	705	0.04	0.11	0.04	740
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	22.3	22.3	< 0.005	< 0.005	0.04	22.6
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	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	19.3	19.3	< 0.005	< 0.005	0.02	20.3
Annual	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	3.70	3.70	< 0.005	< 0.005	0.01	3.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	3.20	3.20	< 0.005	< 0.005	< 0.005	3.36

## 3.2. Demolition (2024) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		2.40	23.3	20.1	0.03	1.01	_	1.01	0.93	_	0.93	_	3,218	3,218	0.13	0.03	_	3,229
Demolitio n	_	_	_	_	_	_	0.54	0.54	_	0.08	0.08	_	_	_	_	_	_	
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	_	6.95	6.95	< 0.005	< 0.005	< 0.005	7.32
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.07	0.64	0.55	< 0.005	0.03	_	0.03	0.03	_	0.03	_	88.2	88.2	< 0.005	< 0.005	_	88.5
Demolitio n	_	_	_	_	_	_	0.01	0.01	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.12	0.10	< 0.005	0.01	_	0.01	< 0.005	_	< 0.005	_	14.6	14.6	< 0.005	< 0.005	_	14.6
Demolitio n	_	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_
Worker	0.30	0.27	0.34	3.83	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	803	803	0.04	0.03	0.09	813
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	0.01	0.92	0.34	< 0.005	0.01	0.19	0.19	0.01	0.05	0.06	_	705	705	0.04	0.11	0.04	740
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	22.3	22.3	< 0.005	< 0.005	0.04	22.6
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	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	19.3	19.3	< 0.005	< 0.005	0.02	20.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	3.70	3.70	< 0.005	< 0.005	0.01	3.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	3.20	3.20	< 0.005	< 0.005	< 0.005	3.36

## 3.3. Site Preparation (2024) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	<u> </u>	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.88	17.3	17.2	0.03	0.80	_	0.80	0.74	_	0.74	_	2,730	2,730	0.11	0.02	_	2,739

Dust From Material Movemen:	<del>-</del>		_	_	_	_	2.77	2.77		1.34	1.34	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	_	6.95	6.95	< 0.005	< 0.005	< 0.005	7.32
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.10	0.95	0.94	< 0.005	0.04	_	0.04	0.04	_	0.04	_	150	150	0.01	< 0.005	_	150
Dust From Material Movemen:		_	_	_	_	-	0.15	0.15	_	0.07	0.07	_	-	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	_	0.38	0.38	< 0.005	< 0.005	< 0.005	0.40
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.02	0.17	0.17	< 0.005	0.01	_	0.01	0.01	_	0.01	_	24.8	24.8	< 0.005	< 0.005	_	24.9
Dust From Material Movemen:	_	_	_	_	_	_	0.03	0.03	_	0.01	0.01	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	-	0.06	0.06	< 0.005	< 0.005	< 0.005	0.07
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.30	0.27	0.34	3.83	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	803	803	0.04	0.03	0.09	813
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	0.11	0.03	1.83	0.68	0.01	0.02	0.37	0.39	0.02	0.10	0.12	Ī_	1,411	1,411	0.08	0.23	0.08	1,480

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.02	0.01	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	44.6	44.6	< 0.005	< 0.005	0.08	45.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	_	77.3	77.3	< 0.005	0.01	0.08	81.2
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	7.39	7.39	< 0.005	< 0.005	0.01	7.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	12.8	12.8	< 0.005	< 0.005	0.01	13.4

## 3.4. Site Preparation (2024) - Mitigated

Jillella i	C III GITGI	(1.07 0.0	.,	,,,.				it, along the			· · · · · · · · · · · · · · · · · · ·							
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.88	17.3	17.2	0.03	0.80	_	0.80	0.74	_	0.74	_	2,730	2,730	0.11	0.02	_	2,739
Dust From Material Movemen:	<u> </u>	_	_	_	_	_	2.77	2.77	_	1.34	1.34	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	_	6.95	6.95	< 0.005	< 0.005	< 0.005	7.32
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
Off-Road Equipmen		0.10	0.95	0.94	< 0.005	0.04	_	0.04	0.04	_	0.04	_	150	150	0.01	< 0.005	_	150

Dust From Material Movemen	_	_	_	_	_	_	0.15	0.15	_	0.07	0.07	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	_	0.38	0.38	< 0.005	< 0.005	< 0.005	0.40
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.02	0.17	0.17	< 0.005	0.01	_	0.01	0.01	_	0.01	_	24.8	24.8	< 0.005	< 0.005	_	24.9
Dust From Material Movemen	_	_	_	_	_	_	0.03	0.03	_	0.01	0.01	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.06	0.06	< 0.005	< 0.005	< 0.005	0.07
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	-	-	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.30	0.27	0.34	3.83	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	803	803	0.04	0.03	0.09	813
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	0.11	0.03	1.83	0.68	0.01	0.02	0.37	0.39	0.02	0.10	0.12	_	1,411	1,411	0.08	0.23	0.08	1,480
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.02	0.01	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	44.6	44.6	< 0.005	< 0.005	0.08	45.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	_	77.3	77.3	< 0.005	0.01	0.08	81.2
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	7.39	7.39	< 0.005	< 0.005	0.01	7.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	12.8	12.8	< 0.005	< 0.005	0.01	12 /
riadiling	< 0.003	< 0.000	0.02	0.01	< 0.000	< 0.000	< 0.000	< 0.000	< 0.000	< 0.000	< 0.000		12.0	12.0	< 0.000	< 0.000	0.01	13.4

## 3.5. Grading (2024) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)		_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.43	13.3	13.2	0.02	0.69	_	0.69	0.64	_	0.64	_	2,075	2,075	0.08	0.02	_	2,082
Dust From Material Movemen	<u> </u>	_	_	_	_	_	2.12	2.12	_	1.01	1.01	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	_	6.95	6.95	< 0.005	< 0.005	< 0.005	7.32
Average Daily	_	_	_	_	_	_	-	-	-	_	-	_	-	_	_	-	_	_
Off-Road Equipmen		0.04	0.36	0.36	< 0.005	0.02	_	0.02	0.02	_	0.02	-	56.9	56.9	< 0.005	< 0.005	_	57.0
Dust From Material Movemen	<u> </u>	_	_	_	_	_	0.06	0.06	_	0.03	0.03	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.07	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	9.41	9.41	< 0.005	< 0.005	_	9.44

Dust From Material Movemen	 r	_	_	_	_	_	0.01	0.01	_	0.01	0.01	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.30	0.27	0.34	3.83	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	803	803	0.04	0.03	0.09	813
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	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	_	282	282	0.02	0.05	0.02	296
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_			_	_	_	_
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	22.3	22.3	< 0.005	< 0.005	0.04	22.6
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	7.73	7.73	< 0.005	< 0.005	0.01	8.12
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	3.70	3.70	< 0.005	< 0.005	0.01	3.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.28	1.28	< 0.005	< 0.005	< 0.005	1.34

## 3.6. Grading (2024) - Mitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	-	-	-	-	_	-	-	-	-	-	_	_	_	_	_	_	_
Off-Road Equipmen		1.43	13.3	13.2	0.02	0.69	_	0.69	0.64	_	0.64	_	2,075	2,075	0.08	0.02	_	2,082
Dust From Material Movemen	_	_	-	-	_	_	2.12	2.12	_	1.01	1.01	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.35	0.35	< 0.005	0.04	0.04	_	6.95	6.95	< 0.005	< 0.005	< 0.005	7.32
Average Daily	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Off-Road Equipmen		0.04	0.36	0.36	< 0.005	0.02	_	0.02	0.02	_	0.02	_	56.9	56.9	< 0.005	< 0.005	_	57.0
Dust From Material Movemen		_	_	_	_	_	0.06	0.06	_	0.03	0.03	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.07	0.07	< 0.005	< 0.005	-	< 0.005	< 0.005	-	< 0.005	_	9.41	9.41	< 0.005	< 0.005	-	9.44
Dust From Material Movemen	_	_	_	_	_	_	0.01	0.01	_	0.01	0.01	_	_	_	_	_	_	_
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	-	-	_	_	_	-	-	_	_	_	_	_	_
Worker	0.30	0.27	0.34	3.83	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	803	803	0.04	0.03	0.09	813
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	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	_	282	282	0.02	0.05	0.02	296
Average Daily	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	22.3	22.3	< 0.005	< 0.005	0.04	22.6
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	7.73	7.73	< 0.005	< 0.005	0.01	8.12
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	3.70	3.70	< 0.005	< 0.005	0.01	3.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.28	1.28	< 0.005	< 0.005	< 0.005	1.34

## 3.7. Building Construction (2025) - Unmitigated

Location	TOG	ROG		СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.01	8.98	13.9	0.02	0.35	_	0.35	0.32	_	0.32	_	2,473	2,473	0.10	0.02	_	2,482
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 Equipmen		1.01	8.98	13.9	0.02	0.35	_	0.35	0.32	_	0.32	_	2,473	2,473	0.10	0.02	_	2,482
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 Equipmen		0.71	6.32	9.82	0.02	0.25	_	0.25	0.23	_	0.23	_	1,742	1,742	0.07	0.01	_	1,748
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 Equipmen		0.13	1.15	1.79	< 0.005	0.04	_	0.04	0.04	-	0.04	_	288	288	0.01	< 0.005	-	289
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	0.29	0.26	0.26	4.17	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	830	830	0.04	0.03	3.04	842
Vendor	0.07	0.03	1.08	0.53	0.01	0.01	0.26	0.27	0.01	0.07	0.08	_	952	952	0.04	0.13	2.60	995
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	0.28	0.25	0.29	3.54	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	786	786	0.04	0.03	0.08	796
Vendor	0.07	0.03	1.13	0.53	0.01	0.01	0.26	0.27	0.01	0.07	0.08	_	952	952	0.04	0.13	0.07	993
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	0.20	0.18	0.22	2.62	0.00	0.00	0.55	0.55	0.00	0.13	0.13	_	562	562	0.03	0.02	0.92	570
Vendor	0.05	0.02	0.80	0.37	< 0.005	0.01	0.18	0.19	< 0.005	0.05	0.05	_	671	671	0.03	0.09	0.80	700
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	0.04	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	_	93.1	93.1	< 0.005	< 0.005	0.15	94.3
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	111	111	< 0.005	0.02	0.13	116
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

## 3.8. Building Construction (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_		_		_	_	_	_	_	_	_
Off-Road Equipmen		1.01	8.98	13.9	0.02	0.35	_	0.35	0.32	_	0.32	_	2,473	2,473	0.10	0.02	_	2,482
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 Equipmen		1.01	8.98	13.9	0.02	0.35	_	0.35	0.32	_	0.32	_	2,473	2,473	0.10	0.02	_	2,482
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 Equipmen		0.71	6.32	9.82	0.02	0.25	_	0.25	0.23	_	0.23	_	1,742	1,742	0.07	0.01	_	1,748

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 Equipmer		0.13	1.15	1.79	< 0.005	0.04	_	0.04	0.04	_	0.04	_	288	288	0.01	< 0.005	_	289
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	0.29	0.26	0.26	4.17	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	830	830	0.04	0.03	3.04	842
Vendor	0.07	0.03	1.08	0.53	0.01	0.01	0.26	0.27	0.01	0.07	0.08	_	952	952	0.04	0.13	2.60	995
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	0.28	0.25	0.29	3.54	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	786	786	0.04	0.03	0.08	796
Vendor	0.07	0.03	1.13	0.53	0.01	0.01	0.26	0.27	0.01	0.07	0.08	_	952	952	0.04	0.13	0.07	993
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	0.20	0.18	0.22	2.62	0.00	0.00	0.55	0.55	0.00	0.13	0.13	_	562	562	0.03	0.02	0.92	570
Vendor	0.05	0.02	0.80	0.37	< 0.005	0.01	0.18	0.19	< 0.005	0.05	0.05	_	671	671	0.03	0.09	0.80	700
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	0.04	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	_	93.1	93.1	< 0.005	< 0.005	0.15	94.3
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	111	111	< 0.005	0.02	0.13	116
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

## 3.9. Building Construction (2026) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.97	8.38	13.9	0.02	0.31	_	0.31	0.29	_	0.29	_	2,474	2,474	0.10	0.02	_	2,482
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 Equipmen		0.16	1.41	2.34	< 0.005	0.05	_	0.05	0.05	_	0.05	_	416	416	0.02	< 0.005	_	418
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 Equipmen		0.03	0.26	0.43	< 0.005	0.01	_	0.01	0.01	_	0.01	_	68.9	68.9	< 0.005	< 0.005	_	69.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.25	0.22	0.26	3.31	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	771	771	0.04	0.03	0.07	780
Vendor	0.07	0.03	1.08	0.51	0.01	0.01	0.26	0.27	0.01	0.07	0.08	_	936	936	0.04	0.13	0.07	977
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	0.04	0.04	0.05	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	_	132	132	0.01	< 0.005	0.20	133
Vendor	0.01	< 0.005	0.18	0.09	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	_	157	157	0.01	0.02	0.18	164
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	_	21.8	21.8	< 0.005	< 0.005	0.03	22.1
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	26.1	26.1	< 0.005	< 0.005	0.03	27.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

# 3.10. Building Construction (2026) - Mitigated

Location	TOG	ROG	NOx	co		PM10E			PM2.5E		PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.97	8.38	13.9	0.02	0.31	_	0.31	0.29	_	0.29	_	2,474	2,474	0.10	0.02	_	2,482
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 Equipmer		0.16	1.41	2.34	< 0.005	0.05	_	0.05	0.05	_	0.05	_	416	416	0.02	< 0.005	_	418
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 Equipmer		0.03	0.26	0.43	< 0.005	0.01	_	0.01	0.01	_	0.01	-	68.9	68.9	< 0.005	< 0.005	-	69.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.25	0.22	0.26	3.31	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	771	771	0.04	0.03	0.07	780
Vendor	0.07	0.03	1.08	0.51	0.01	0.01	0.26	0.27	0.01	0.07	0.08	_	936	936	0.04	0.13	0.07	977
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	0.04	0.04	0.05	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	_	132	132	0.01	< 0.005	0.20	133
Vendor	0.01	< 0.005	0.18	0.09	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	_	157	157	0.01	0.02	0.18	164
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	_	21.8	21.8	< 0.005	< 0.005	0.03	22.1
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	26.1	26.1	< 0.005	< 0.005	0.03	27.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

# 3.11. Paving (2026) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.65	5.83	7.50	0.01	0.26	_	0.26	0.24	_	0.24	_	1,145	1,145	0.05	0.01	_	1,149
Paving	_	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	-	_	_	-	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.65	5.83	7.50	0.01	0.26	_	0.26	0.24	_	0.24	_	1,145	1,145	0.05	0.01	_	1,149
Paving	_	0.00	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.04	0.32	0.41	< 0.005	0.01	_	0.01	0.01	_	0.01	_	62.8	62.8	< 0.005	< 0.005	_	63.0
Paving	_	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.06	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.4	10.4	< 0.005	< 0.005	_	10.4
Paving	_	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	_	_	<u> </u>	_	_	_	<u> </u>	_	_	_	-	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.25	0.22	0.23	3.88	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	813	813	0.03	0.03	2.75	825
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	125	125	0.01	0.02	0.34	130
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	0.25	0.22	0.26	3.31	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	771	771	0.04	0.03	0.07	780
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	125	125	0.01	0.02	0.01	130
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	0.01	0.01	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	42.9	42.9	< 0.005	< 0.005	0.07	43.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	6.83	6.83	< 0.005	< 0.005	0.01	7.14
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	7.09	7.09	< 0.005	< 0.005	0.01	7.19
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
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. Paving (2026) - Mitigated

				<i>y</i> ,					<i>J</i> ,									
Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_		_	_	_	_	_	_		_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_

Off-Road Equipmen		0.65	5.83	7.50	0.01	0.26	_	0.26	0.24	_	0.24	_	1,145	1,145	0.05	0.01	_	1,149
Paving	_	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.65	5.83	7.50	0.01	0.26	_	0.26	0.24	_	0.24	_	1,145	1,145	0.05	0.01	_	1,149
Paving	_	0.00	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.04	0.32	0.41	< 0.005	0.01	_	0.01	0.01	-	0.01	-	62.8	62.8	< 0.005	< 0.005	_	63.0
Paving	_	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.06	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	-	< 0.005	-	10.4	10.4	< 0.005	< 0.005	-	10.4
Paving	_	0.00	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.25	0.22	0.23	3.88	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	813	813	0.03	0.03	2.75	825
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	125	125	0.01	0.02	0.34	130

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	0.25	0.22	0.26	3.31	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	771	771	0.04	0.03	0.07	780
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	125	125	0.01	0.02	0.01	130
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	0.01	0.01	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	42.9	42.9	< 0.005	< 0.005	0.07	43.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	6.83	6.83	< 0.005	< 0.005	0.01	7.14
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	7.09	7.09	< 0.005	< 0.005	0.01	7.19
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
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

## 3.13. Architectural Coating (2026) - Unmitigated

					TOT GITTE		· ·											
Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.28	2.44	3.04	< 0.005	0.05	_	0.05	0.05	_	0.05	_	415	415	0.02	< 0.005	_	416
Architect ural Coatings	_	3.35	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Average Daily	_	_	-	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_
Off-Road Equipmer		0.01	0.07	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	11.4	11.4	< 0.005	< 0.005	_	11.4
Architect ural Coatings	_	0.09	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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 Equipmer		< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	1.88	1.88	< 0.005	< 0.005	_	1.89
Architect ural Coatings	_	0.02	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Worker	0.25	0.22	0.23	3.88	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	813	813	0.03	0.03	2.75	825
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	_	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	-	_	_	_	-	_	_	-	-	_	_	_	_	_	_	-

Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	21.4	21.4	< 0.005	< 0.005	0.03	21.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	3.55	3.55	< 0.005	< 0.005	0.01	3.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
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

# 3.14. Architectural Coating (2026) - Mitigated

		<del></del>							<u> </u>								
TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	0.28	2.44	3.04	< 0.005	0.05	_	0.05	0.05	_	0.05	_	415	415	0.02	< 0.005	_	416
_	3.35	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	0.01	0.07	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	11.4	11.4	< 0.005	< 0.005	_	11.4
_	0.09	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	TOG  0.34 t 0.00 0.01 t		—       —         —       —         0.34 t       0.28 2.44 t         —       3.35 —         0.00 0.00 0.00 0.00 —       —         —       —         0.01 0.01 0.07 t       0.07 0.07 t			—       —       —       —       —       —         —       —       —       —       —       —         0.34 t       0.28       2.44       3.04       < 0.005	—       —       —       —       —       —         —       —       —       —       —       —         —       0.34       0.28       2.44       3.04       < 0.005	—       —	TOG         ROG         NOX         CO         SO2         PM10E         PM10D         PM10T         PM2.5E           —         —         —         —         —         —         —         —         —           —         —         —         —         —         —         —         —         —           0.34 t         0.28         2.44         3.04         < 0.005	TOG         ROG         NOX         CO         SO2         PM10E         PM10D         PM10T         PM2.5E         PM2.5D           —         <	TOG         ROG         NOX         CO         SO2         PM10E         PM10D         PM10T         PM2.5E         PM2.5D         PM2.5T           —         —         —         —         —         —         —         —         —         —           —         —         —         —         —         —         —         —         —           0.34 t         0.28         2.44         3.04         < 0.005	TOG         ROG         NOX         CO         SO2         PM10E         PM10D         PM10T         PM2.5E         PM2.5D         PM2.5T         BCO2           —         —         —         —         —         —         —         —         —         —           —         —         —         —         —         —         —         —         —           0.34         0.28         2.44         3.04         < 0.005	TOG         ROG         NOX         CO         SO2         PM10E         PM10D         PM10T         PM2.5E         PM2.5D         PM2.5T         BCO2         NBCO2	TOG         ROG         NOX         CO         SO2         PM10E         PM10D         PM10T         PM2.5E         PM2.5D         PM2.5T         BCO2         NBCO2         CO2T           —	TOG         ROG         NOX         CO         SO2         PM10E         PM10D         PM2.5E         PM2.5E         PM2.5D         PM2.5T         BCO2         NBCO2         CO2T         CH4	TOG         ROG         NOX         CO         SO2         PM10E         PM10D         PM2.5E         PM2.5E         PM2.5D         PM2.5T         BCO2         NBCO2         CO2T         CH4         N2O	TOG         ROG         NOX         CO         SO2         PM10E         PM10D         PM2.5E         PM2.5D         PM2.5T         BCO2         NBCO2         CO2T         CH4         N2O         R           —

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 Equipmer		< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	-	< 0.005	-	1.88	1.88	< 0.005	< 0.005	-	1.89
Architect ural Coatings	_	0.02	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.25	0.22	0.23	3.88	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	813	813	0.03	0.03	2.75	825
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	_	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	21.4	21.4	< 0.005	< 0.005	0.03	21.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	3.55	3.55	< 0.005	< 0.005	0.01	3.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00
Daily, Winter (Max)	_		_	_	_	_	_	_	_	_	_	_	_	_		_	_	-
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	0.00	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00

### 4.1.2. Mitigated

	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	-	-	-	-	-	_	-	_	_	-	_	_	-	-	_	_	-	_
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	0.00	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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	0.00	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00

## 4.2. Energy

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

	TOG	ROG	NOx	со	SO2	PM10E			PM2.5E			BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	_	51.4	51.4	< 0.005	< 0.005	_	51.7
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	_	247	247	0.02	< 0.005	_	248
Total	_	_	_	_	_	_	_	_	_	_	_	_	298	298	0.03	< 0.005	_	300
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center		_	_	_	_		_	_	_	_	_	_	51.4	51.4	< 0.005	< 0.005	_	51.7

Enclosed Parking with Elevator	_	-	_	_	_	_	_	_	_	_	_	_	247	247	0.02	< 0.005	_	248
Total	_	_	_	_	_	_	_	_	_	_	_	_	298	298	0.03	< 0.005	_	300
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	_	8.51	8.51	< 0.005	< 0.005	_	8.56
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	_	40.9	40.9	< 0.005	< 0.005	_	41.1
Total	_	_	_	_	_	_	_	_	_	_	_	_	49.4	49.4	< 0.005	< 0.005	_	49.7

### 4.2.2. Electricity Emissions By Land Use - Mitigated

Cillella																		
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_
Regional Shopping Center		_	_	_	_	_	_	_	_	_	_	_	51.4	51.4	< 0.005	< 0.005	_	51.7
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_		_	247	247	0.02	< 0.005	_	248
Total	_	_	_	_	_	_	_	_	_	_	_	_	298	298	0.03	< 0.005	_	300
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_

Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	_	51.4	51.4	< 0.005	< 0.005	_	51.7
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	_	247	247	0.02	< 0.005	_	248
Total	_	_	_	_	_	_	_	_	_	_	_	_	298	298	0.03	< 0.005	_	300
Annual	_	_	_	_	_	_	<u> </u>	_		_	<u> </u>	_	_	_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	_	8.51	8.51	< 0.005	< 0.005	_	8.56
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	_	40.9	40.9	< 0.005	< 0.005	_	41.1
Total	_	_	_	_	_	_	_	_	_	_	_	_	49.4	49.4	< 0.005	< 0.005	_	49.7

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.6	10.6	< 0.005	< 0.005	_	10.6
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.6	10.6	< 0.005	< 0.005	_	10.6

Daily, Winter (Max)	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center		< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.6	10.6	< 0.005	< 0.005	_	10.6
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.6	10.6	< 0.005	< 0.005	_	10.6
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.75	1.75	< 0.005	< 0.005	_	1.76
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.75	1.75	< 0.005	< 0.005	_	1.76

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

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.6	10.6	< 0.005	< 0.005	_	10.6
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00

Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.6	10.6	< 0.005	< 0.005	_	10.6
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.6	10.6	< 0.005	< 0.005	_	10.6
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	10.6	10.6	< 0.005	< 0.005	_	10.6
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.75	1.75	< 0.005	< 0.005	_	1.76
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.75	1.75	< 0.005	< 0.005	_	1.76

## 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.12	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Architect Coatings	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.59	0.54	0.03	3.31	< 0.005	< 0.005	_	< 0.005	0.01	_	0.01	_	13.6	13.6	< 0.005	< 0.005	_	13.7
Total	0.59	0.68	0.03	3.31	< 0.005	< 0.005	_	< 0.005	0.01	_	0.01	_	13.6	13.6	< 0.005	< 0.005	_	13.7
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.12	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	0.14	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Landsca pe Equipme nt	0.07	0.07	< 0.005	0.41	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.54	1.54	< 0.005	< 0.005	_	1.55
Total	0.07	0.09	< 0.005	0.41	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.54	1.54	< 0.005	< 0.005	_	1.55

### 4.3.1. Mitigated

			,	<i>J</i> , <i>J</i>		,		<i>j</i>			/							
_	I = 0 0		Luc			DIMAGE	D1446D	DIALOT	D140 FF	D140 ED	DIAC ET	1000	LUDGGG	LOGGE	10114	Luco		
Source	I I ( ) ( <del>i</del>	IROG	I N( )x	ICO	1802	1PM10E	1 PM100	I PM101	IPM2 5E	1PM2 5D	1PM251	BCO2	INRCO	1CO21	IC:H4	IN2O	IR	CO2e
Course	100	11100	IIIOX	100	1002	11 101100	II MIIOD		I IVIZ.OL	11112.00	11 1112.01	10002	110002	10021	10111	11420	' `	10020

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.12	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.01	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.59	0.54	0.03	3.31	< 0.005	< 0.005	_	< 0.005	0.01	_	0.01	_	13.6	13.6	< 0.005	< 0.005	_	13.7
Total	0.59	0.68	0.03	3.31	< 0.005	< 0.005	_	< 0.005	0.01	_	0.01	_	13.6	13.6	< 0.005	< 0.005	_	13.7
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_
Consum er Products	_	0.12	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.01	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	0.13	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.07	0.07	< 0.005	0.41	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.54	1.54	< 0.005	< 0.005	_	1.55
Total	0.07	0.09	< 0.005	0.41	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.54	1.54	< 0.005	< 0.005	_	1.55

## 4.4. Water Emissions by Land Use

#### 4.4.2. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	-	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_		_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	0.13	0.44	0.57	0.01	< 0.005	_	1.00

Enclosed	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking																		
with Elevator																		
Total	_	_	_	_	_	_	_	_	_	_	_	0.13	0.44	0.57	0.01	< 0.005	_	1.00

### 4.4.1. Mitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	-	-	-	_	_	_	_	_	-	_	_
Regional Shopping Center		_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Daily, Winter (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center		_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.78	2.64	3.42	0.08	< 0.005	_	6.02
Annual	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_

Regional Shopping Center	_	_	_	_	_	_	_	_	_	_		0.13	0.44	0.57	0.01	< 0.005	_	1.00
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.13	0.44	0.57	0.01	< 0.005	_	1.00

## 4.5. Waste Emissions by Land Use

## 4.5.2. Unmitigated

Land Use		ROG		со				PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center		_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center		_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9

Enclosed Parking with Elevator	_	-	_	_	-	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center		_	_	_	_	_	_	_	_	_	_	0.52	0.00	0.52	0.05	0.00	_	1.81
Enclosed Parking with Elevator	_	-	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	0.00	0.52	0.05	0.00	_	1.81

### 4.5.1. Mitigated

Land Use	TOG	ROG		со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center		_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Enclosed Parking with Elevator	_	_	_	_	_	_		_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	3.12	0.00	3.12	0.31	0.00	_	10.9
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	0.52	0.00	0.52	0.05	0.00	_	1.81
Enclosed Parking with Elevator	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	0.00	0.52	0.05	0.00	_	1.81

# 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D		PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Daily, Winter (Max)	_	_	_	_	_	_	_	_		_	_	_		_	_	_	_	_

Regional Shopping Center	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	0.03	0.03
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005

# 4.6.2. Mitigated

		(1.07 0.01	<i>j</i>	<i>J</i> ,	101 0.1111		J. 100 (.		Gionny, it	.,	,							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Total	_	_	_	_	_	_	<u> </u>	_	_	_	<u> </u>	_		_	_	_	0.03	0.03
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.03	0.03
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Regional Shopping Center	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005

### 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)

				y, tonyy														
Equipme	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt																		
Type																		
Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer																		
(Max)																		
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily,	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winter																		
(Max)																		
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_

#### 4.7.2. Mitigated

		(	,	<i>y</i> , <i>y</i> .		,		· · · · · ·										
Equipme nt Type	TOG	ROG	NOx	со	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)

Equipme nt Type	TOG	ROG	NOx	СО	SO2	PM10E			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

Equipme	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Туре																		
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)

Equipme nt Type								PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.9.2. Mitigated

		(,	,	· <b>J</b> , <b>J</b> -		, , , , , , , , , , , , , , , , , , , ,		,,	<b>,</b>		,							
Equipme	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt																		
Туре																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_
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)

Vegetatio n	TOG	ROG		со	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

Land Use	TOG	ROG	NOx	СО	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

				iy, tori/yr														
Species	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	<u> </u>	_	_	_	_	_	<u> </u>	_	<u> </u>	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetatio n	TOG	ROG	NOx	со	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	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	<u> </u>	_	_	_	_
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		со	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

Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_		<u> </u>	_		_	_	_		_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Remove	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_		_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	11/4/2024	11/18/2024	5.00	10.0	Demolish buildings.
Excavation	Site Preparation	11/19/2024	12/16/2024	5.00	20.0	Excavate parking structure foundation (3,200 CY exported)
Site Preparation/Grading	Grading	12/17/2024	12/30/2024	5.00	10.0	Leveling site.
Building Construction	Building Construction	1/6/2025	3/27/2026	5.00	320	_
Paving	Paving	3/30/2026	4/24/2026	5.00	20.0	_
Architectural Coating	Architectural Coating	4/27/2026	5/8/2026	5.00	10.0	_

# 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Architectural Coating	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Site Preparation/Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Site Preparation/Grading	Tractors/Loaders/Backh oes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Rubber Tired Loaders	Diesel	Average	2.00	8.00	150	0.36
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Demolition	Tractors/Loaders/Backh oes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Paving	Pavers	Diesel	Average	2.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	2.00	7.00	36.0	0.38

Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Excavation	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Excavation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Site Preparation/Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Site Preparation/Grading	Rubber Tired Loaders	Diesel	Average	1.00	7.00	150	0.36
Architectural Coating	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Paving	Paving Equipment	Diesel	Average	1.00	7.00	89.0	0.36
Building Construction	Welders	Diesel	Average	1.00	6.00	46.0	0.45

### 5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Architectural Coating	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Site Preparation/Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Site Preparation/Grading	Tractors/Loaders/Backh oes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Rubber Tired Loaders	Diesel	Average	2.00	8.00	150	0.36
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Demolition	Tractors/Loaders/Backh oes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29

Paving	Pavers	Diesel	Average	2.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	2.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Excavation	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Excavation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
<b>Building Construction</b>	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Site Preparation/Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Site Preparation/Grading	Rubber Tired Loaders	Diesel	Average	1.00	7.00	150	0.36
Architectural Coating	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Paving	Paving Equipment	Diesel	Average	1.00	7.00	89.0	0.36
Building Construction	Welders	Diesel	Average	1.00	6.00	46.0	0.45

### 5.3. Construction Vehicles

# 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	_	_	_	_
Demolition	Worker	60.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	_	10.2	HHDT,MHDT
Demolition	Hauling	10.0	20.0	HHDT
Demolition	Onsite truck	2.00	0.50	HHDT
Site Preparation/Grading	_	_	_	_
Site Preparation/Grading	Worker	60.0	18.5	LDA,LDT1,LDT2

Site Preparation/Grading	Vendor	_	10.2	HHDT,MHDT
Site Preparation/Grading	Hauling	4.00	20.0	HHDT
Site Preparation/Grading	Onsite truck	2.00	0.50	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	60.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	30.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	60.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	60.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	4.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Excavation	_	_	_	_
Excavation	Worker	60.0	18.5	LDA,LDT1,LDT2
Excavation	Vendor	_	10.2	HHDT,MHDT
Excavation	Hauling	20.0	20.0	HHDT
Excavation	Onsite truck	2.00	0.50	HHDT

# 5.3.2. Mitigated

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

Demolition	Worker	60.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	_	10.2	HHDT,MHDT
Demolition	Hauling	10.0	20.0	ннот
Demolition	Onsite truck	2.00	0.50	ннот
Site Preparation/Grading	_	_	_	_
Site Preparation/Grading	Worker	60.0	18.5	LDA,LDT1,LDT2
Site Preparation/Grading	Vendor	_	10.2	HHDT,MHDT
Site Preparation/Grading	Hauling	4.00	20.0	ННОТ
Site Preparation/Grading	Onsite truck	2.00	0.50	ННОТ
Building Construction	_	_	_	_
Building Construction	Worker	60.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	30.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	ННОТ
Building Construction	Onsite truck	_	_	ННОТ
Architectural Coating	_	_	_	_
Architectural Coating	Worker	60.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	ННОТ
Architectural Coating	Onsite truck	_	_	ННОТ
Paving	_	_	_	_
Paving	Worker	60.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	4.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	ннот
Paving	Onsite truck	_	_	ННОТ
Excavation	_	_	_	_
Excavation	Worker	60.0	18.5	LDA,LDT1,LDT2
Excavation	Vendor	_	10.2	ннот,мнот

Excavation	Hauling	20.0	20.0	HHDT
Excavation	Onsite truck	2.00	0.50	HHDT

#### 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

### 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	2,500	2,500	2,222

# 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)		Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	8,503	_
Excavation	0.00	3,200	20.0	0.00	_
Site Preparation/Grading	0.00	0.00	22.5	0.00	_
Paving	0.00	0.00	0.00	0.00	0.85

### 5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction

Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

### 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Regional Shopping Center	0.00	0%
Enclosed Parking with Elevator	0.85	0%

### 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	349	0.03	< 0.005
2025	0.00	349	0.03	< 0.005
2026	0.00	346	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
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Enclosed Parking with Elevator	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/Ye	se Type Trips/We	Trips/Weekday Trips/Saturday Tri	Trips/Sunday Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
---	------------------	----------------------------------	-------------------------	-------------	--------------	------------	----------

Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	9,945	2,945	2,222

### 5.10.3. Landscape Equipment

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

#### 5.10.4. Landscape Equipment - Mitigated

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

# 5.11. Operational Energy Consumption

#### 5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Regional Shopping Center	54,204	346	0.0330	0.0040	33,042
Enclosed Parking with Elevator	260,394	346	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)
Regional Shopping Center	54,204	346	0.0330	0.0040	33,042
Enclosed Parking with Elevator	260,394	346	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)	
Regional Shopping Center	408,806	0.00	
Enclosed Parking with Elevator	0.00	0.00	

#### 5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)	
Regional Shopping Center	408,806	0.00	
Enclosed Parking with Elevator	0.00	0.00	

### 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)	
Regional Shopping Center	5.79	0.00	
Enclosed Parking with Elevator	0.00	0.00	

#### 5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)	
Regional Shopping Center	5.79	0.00	
Enclosed Parking with Elevator	0.00	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
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

#### 5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Regional Shopping	Stand-alone retail	R-134a	1,430	0.04	1.00	0.00	1.00
Center	refrigerators and freezers						

### 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
—-Jankanana 17 ka		5				

#### 5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Por Doy	Haraanawar	Load Factor
Equipment Type	ruei type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

### 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

E au iii	omant Tuna	Fuel Time	Number per Dou	Hours par Dov	Hours per Voor	Horoopowor	Load Footor
Equi	pment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

#### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMRtu/day)	Appual Hoot Input (MMRtu/yr)
Equipment Type	ruei type	Number	Doller Rating (MiMbtu/III)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MiMbtu/yi)

#### 5.17. User Defined

Equipment Type	Fuel Type
_	_

### 5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

 Vegetation Land Use Type
 Vegetation Soil Type
 Initial Acres
 Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type Vegetation Soil Type Initial Acres Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type Final Acres Final Acres

5.18.1.2. Mitigated

Biomass Cover Type Final Acres Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

# 6. Climate Risk Detailed Report

#### 6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.24	annual days of extreme heat
Extreme Precipitation	4.10	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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

#### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	2	1
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	3	2	2
Wildfire	1	1	2	1
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	5	1	2	3

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	1	1	2	1
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	3	2	2
Wildfire	1	1	2	1
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	5	1	2	3

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	20.8

AQ-PM	67.6
AQ-DPM	97.6
Drinking Water	34.7
Lead Risk Housing	29.3
Pesticides	0.00
Toxic Releases	97.3
Traffic	58.0
Effect Indicators	_
CleanUp Sites	44.8
Groundwater	57.2
Haz Waste Facilities/Generators	82.4
Impaired Water Bodies	90.1
Solid Waste	93.8
Sensitive Population	_
Asthma	85.4
Cardio-vascular	69.4
Low Birth Weights	97.9
Socioeconomic Factor Indicators	_
Education	10.3
Housing	56.9
Linguistic	25.6
Poverty	22.0
Unemployment	35.0

### 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

	1
Economic	_
Above Poverty	69.69074811
Employed	74.38727063
Median HI	57.21801617
Education	
Bachelor's or higher	85.98742461
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	_
Auto Access	24.21403824
Active commuting	86.05158476
Social	_
2-parent households	79.76389067
Voting	1.642499679
Neighborhood	_
Alcohol availability	18.95290645
Park access	34.38983703
Retail density	97.9468754
Supermarket access	80.63646863
Tree canopy	12.11343513
Housing	_
Homeownership	28.02515078
Housing habitability	35.67303991
Low-inc homeowner severe housing cost burden	62.91543693
Low-inc renter severe housing cost burden	60.00256641
Uncrowded housing	39.26600796
Health Outcomes	_

Insured adults	67.86860003
Arthritis	88.7
Asthma ER Admissions	13.3
High Blood Pressure	71.3
Cancer (excluding skin)	47.4
Asthma	88.8
Coronary Heart Disease	81.5
Chronic Obstructive Pulmonary Disease	89.8
Diagnosed Diabetes	86.4
Life Expectancy at Birth	34.9
Cognitively Disabled	48.3
Physically Disabled	46.5
Heart Attack ER Admissions	33.5
Mental Health Not Good	80.9
Chronic Kidney Disease	85.5
Obesity	67.3
Pedestrian Injuries	74.1
Physical Health Not Good	86.2
Stroke	84.7
Health Risk Behaviors	_
Binge Drinking	11.9
Current Smoker	75.7
No Leisure Time for Physical Activity	89.3
Climate Change Exposures	_
Wildfire Risk	0.0
SLR Inundation Area	15.8
Children	44.4

Elderly	32.8
English Speaking	56.8
Foreign-born	60.8
Outdoor Workers	91.7
Climate Change Adaptive Capacity	_
Impervious Surface Cover	2.8
Traffic Density	49.7
Traffic Access	87.4
Other Indices	_
Hardship	9.2
Other Decision Support	_
2016 Voting	19.7

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	78.0
Healthy Places Index Score for Project Location (b)	62.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	Wilmington Long Beach Carson

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.

#### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

#### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

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.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Assumed schedule
Construction: Off-Road Equipment	assumed equipment
Construction: Paving	parking garage is not paved (concrete structure)
Operations: Vehicle Data	No new net trips.
Land Use	Two-level parking structure with footprint of 35,268 sq. ft.
Construction: Trips and VMT	Trip data provided by Applicant.
Construction: Dust From Material Movement	Parking structure foundation requires 3,200 CY of cut & export.
Construction: Architectural Coatings	Parking structure will be concrete, limited architectural coatings applied.

# Shoreline Village Renovations Detailed Report

#### Table of Contents

- 1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year, Unmitigated
  - 2.3. Construction Emissions by Year, Mitigated
- 3. Construction Emissions Details
  - 3.1. Building Construction (2025) Unmitigated
  - 3.2. Building Construction (2025) Mitigated
  - 3.3. Building Construction (2026) Unmitigated
  - 3.4. Building Construction (2026) Mitigated
  - 3.5. Paving (2026) Unmitigated

- 3.6. Paving (2026) Mitigated
- 3.7. Architectural Coating (2026) Unmitigated
- 3.8. Architectural Coating (2026) Mitigated
- 4. Operations Emissions Details
  - 4.10. Soil Carbon Accumulation By Vegetation Type
    - 4.10.1. Soil Carbon Accumulation By Vegetation Type Unmitigated
    - 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type Unmitigated
    - 4.10.3. Avoided and Sequestered Emissions by Species Unmitigated
    - 4.10.4. Soil Carbon Accumulation By Vegetation Type Mitigated
    - 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type Mitigated
    - 4.10.6. Avoided and Sequestered Emissions by Species Mitigated
- 5. Activity Data
  - 5.1. Construction Schedule
  - 5.2. Off-Road Equipment
    - 5.2.1. Unmitigated
    - 5.2.2. Mitigated
  - 5.3. Construction Vehicles

- 5.3.1. Unmitigated
- 5.3.2. Mitigated
- 5.4. Vehicles
  - 5.4.1. Construction Vehicle Control Strategies
- 5.5. Architectural Coatings
- 5.6. Dust Mitigation
  - 5.6.1. Construction Earthmoving Activities
  - 5.6.2. Construction Earthmoving Control Strategies
- 5.7. Construction Paving
- 5.8. Construction Electricity Consumption and Emissions Factors
- 5.18. Vegetation
  - 5.18.1. Land Use Change
    - 5.18.1.1. Unmitigated
    - 5.18.1.2. Mitigated
  - 5.18.1. Biomass Cover Type
    - 5.18.1.1. Unmitigated
    - 5.18.1.2. Mitigated

- 5.18.2. Sequestration
  - 5.18.2.1. Unmitigated
  - 5.18.2.2. Mitigated
- 6. Climate Risk Detailed Report
  - 6.1. Climate Risk Summary
  - 6.2. Initial Climate Risk Scores
  - 6.3. Adjusted Climate Risk Scores
  - 6.4. Climate Risk Reduction Measures
    - 6.4.1. Temperature and Extreme Heat
    - 6.4.2. Air Quality Degradation
- 7. Health and Equity Details
  - 7.1. CalEnviroScreen 4.0 Scores
  - 7.2. Healthy Places Index Scores
  - 7.3. Overall Health & Equity Scores
  - 7.4. Health & Equity Measures
  - 7.5. Evaluation Scorecard
  - 7.6. Health & Equity Custom Measures

8. User Changes to Default Data

# 1. Basic Project Information

### 1.1. Basic Project Information

Data Field	Value
Project Name	Shoreline Village Renovations
Lead Agency	City of Long Beach
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.30
Precipitation (days)	18.4
Location	33.76052562980736, -118.189848893739
County	Los Angeles-South Coast
City	Long Beach
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4773
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Long Beach Gas & Oil

# 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	0.42	Acre	0.42	0.00	951	951	_	_
Parking Lot	134	1000sqft	3.08	0.00	17,861	_	_	_

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

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-33*	Locate Project near Bike Path/Bike Lane
Transportation	T-34*	Provide Bike Parking

<sup>\*</sup> Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	-	_	_	_	-	-	_	_	-	-	_	-	_	_	-	-	_
Unmit.	0.73	0.72	4.38	10.6	0.01	0.14	0.96	1.07	0.13	0.23	0.34	_	2,471	2,471	0.10	0.13	4.77	2,516
Mit.	0.73	0.72	4.38	10.6	0.01	0.14	0.96	1.07	0.13	0.23	0.34	_	2,471	2,471	0.10	0.13	4.77	2,516
% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.73	0.72	4.44	9.98	0.01	0.14	0.96	1.07	0.13	0.23	0.34	_	2,428	2,428	0.10	0.13	0.12	2,468
Mit.	0.73	0.72	4.44	9.98	0.01	0.14	0.96	1.07	0.13	0.23	0.34	_	2,428	2,428	0.10	0.13	0.12	2,468
% Reduced	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	-	-	_	_
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Unmit.	0.19	0.16	1.19	2.70	< 0.005	0.03	0.25	0.28	0.03	0.06	0.09	_	649	649	0.03	0.03	0.55	660
Mit.	0.19	0.16	1.19	2.70	< 0.005	0.03	0.25	0.28	0.03	0.06	0.09	_	649	649	0.03	0.03	0.55	660
% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.04	0.03	0.22	0.49	< 0.005	0.01	0.05	0.05	0.01	0.01	0.02	_	107	107	< 0.005	0.01	0.09	109
Mit.	0.04	0.03	0.22	0.49	< 0.005	0.01	0.05	0.05	0.01	0.01	0.02	_	107	107	< 0.005	0.01	0.09	109
% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Exceeds (Daily Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	75.0	100	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Mit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Exceeds (Average Daily)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	75.0	100	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Mit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_

## 2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer (Max)																		

2025	0.73	0.61	4.38	10.6	0.01	0.12	0.96	1.07	0.11	0.23	0.34		2,471	2,471	0.10	0.13	4.77	2,516
2026	0.38	0.72	3.05	4.24	0.01	0.14	0.00	0.14	0.13	0.00	0.13	_	645	645	0.03	0.01	0.00	648
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.73	0.61	4.44	9.98	0.01	0.12	0.96	1.07	0.11	0.23	0.34	_	2,428	2,428	0.10	0.13	0.12	2,468
2026	0.67	0.72	4.15	9.74	0.01	0.14	0.96	1.06	0.13	0.23	0.32	_	2,402	2,402	0.10	0.13	0.12	2,442
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.19	0.16	1.19	2.70	< 0.005	0.03	0.25	0.28	0.03	0.06	0.09	_	649	649	0.03	0.03	0.55	660
2026	0.14	0.14	0.94	1.98	< 0.005	0.03	0.16	0.19	0.02	0.04	0.06	_	453	453	0.02	0.02	0.32	460
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.04	0.03	0.22	0.49	< 0.005	0.01	0.05	0.05	0.01	0.01	0.02	_	107	107	< 0.005	0.01	0.09	109
2026	0.03	0.03	0.17	0.36	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01		75.0	75.0	< 0.005	< 0.005	0.05	76.2

## 2.3. Construction Emissions by Year, Mitigated

Year	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E		PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.73	0.61	4.38	10.6	0.01	0.12	0.96	1.07	0.11	0.23	0.34	_	2,471	2,471	0.10	0.13	4.77	2,516
2026	0.38	0.72	3.05	4.24	0.01	0.14	0.00	0.14	0.13	0.00	0.13	_	645	645	0.03	0.01	0.00	648
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.73	0.61	4.44	9.98	0.01	0.12	0.96	1.07	0.11	0.23	0.34	_	2,428	2,428	0.10	0.13	0.12	2,468
2026	0.67	0.72	4.15	9.74	0.01	0.14	0.96	1.06	0.13	0.23	0.32	_	2,402	2,402	0.10	0.13	0.12	2,442
Average Daily	_	_	_	-	_	-	_	_	_	_	_	_	-	_	_	_	_	-

2025	0.19	0.16	1.19	2.70	< 0.005	0.03	0.25	0.28	0.03	0.06	0.09	_	649	649	0.03	0.03	0.55	660
2026	0.14	0.14	0.94	1.98	< 0.005	0.03	0.16	0.19	0.02	0.04	0.06	_	453	453	0.02	0.02	0.32	460
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.04	0.03	0.22	0.49	< 0.005	0.01	0.05	0.05	0.01	0.01	0.02	_	107	107	< 0.005	0.01	0.09	109
2026	0.03	0.03	0.17	0.36	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	75.0	75.0	< 0.005	< 0.005	0.05	76.2

# 3. Construction Emissions Details

## 3.1. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E		PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.33	3.40	6.08	0.01	0.11	_	0.11	0.10	_	0.10	_	1,007	1,007	0.04	0.01	_	1,010
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 Equipmen		0.33	3.40	6.08	0.01	0.11	_	0.11	0.10	_	0.10	_	1,007	1,007	0.04	0.01	_	1,010
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 Equipmen		0.09	0.90	1.62	< 0.005	0.03	_	0.03	0.03	_	0.03	_	268	268	0.01	< 0.005	_	269

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 Equipmer		0.02	0.16	0.30	< 0.005	0.01	_	0.01	< 0.005	_	< 0.005	_	44.4	44.4	< 0.005	< 0.005	_	44.5
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
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.29	0.26	0.26	4.17	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	830	830	0.04	0.03	3.04	842
Vendor	0.05	0.02	0.72	0.35	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	_	635	635	0.03	0.09	1.74	663
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	0.28	0.25	0.29	3.54	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	786	786	0.04	0.03	0.08	796
Vendor	0.05	0.02	0.75	0.36	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	_	635	635	0.03	0.09	0.05	662
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	0.08	0.07	0.08	0.99	0.00	0.00	0.21	0.21	0.00	0.05	0.05	_	212	212	0.01	0.01	0.35	215
Vendor	0.01	< 0.005	0.20	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	_	169	169	0.01	0.02	0.20	176
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	0.01	0.01	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	35.2	35.2	< 0.005	< 0.005	0.06	35.6
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	28.0	28.0	< 0.005	< 0.005	0.03	29.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

## 3.2. Building Construction (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.33	3.40	6.08	0.01	0.11	_	0.11	0.10	_	0.10	_	1,007	1,007	0.04	0.01	_	1,010
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 Equipmen		0.33	3.40	6.08	0.01	0.11	_	0.11	0.10	_	0.10	_	1,007	1,007	0.04	0.01	_	1,010
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 Equipmen		0.09	0.90	1.62	< 0.005	0.03	_	0.03	0.03	_	0.03	_	268	268	0.01	< 0.005	_	269
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	_	_	_	<u> </u>	_	_	_	-	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.02	0.16	0.30	< 0.005	0.01	_	0.01	< 0.005	_	< 0.005	_	44.4	44.4	< 0.005	< 0.005	_	44.5
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
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.29	0.26	0.26	4.17	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	830	830	0.04	0.03	3.04	842
Vendor	0.05	0.02	0.72	0.35	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	_	635	635	0.03	0.09	1.74	663
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	0.28	0.25	0.29	3.54	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	786	786	0.04	0.03	0.08	796
Vendor	0.05	0.02	0.75	0.36	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	_	635	635	0.03	0.09	0.05	662
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	0.08	0.07	0.08	0.99	0.00	0.00	0.21	0.21	0.00	0.05	0.05	_	212	212	0.01	0.01	0.35	215
Vendor	0.01	< 0.005	0.20	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	_	169	169	0.01	0.02	0.20	176
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	0.01	0.01	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	35.2	35.2	< 0.005	< 0.005	0.06	35.6
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	28.0	28.0	< 0.005	< 0.005	0.03	29.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

## 3.3. Building Construction (2026) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	-		_	_	_	_	_
Off-Road Equipmen		0.32	3.17	6.09	0.01	0.10	_	0.10	0.09	_	0.09	_	1,007	1,007	0.04	0.01	_	1,011
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 Equipmen		0.05	0.53	1.03	< 0.005	0.02	_	0.02	0.02	_	0.02	_	170	170	0.01	< 0.005	_	170
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	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.10	0.19	< 0.005	< 0.005	_	< 0.005	< 0.005	-	< 0.005	-	28.1	28.1	< 0.005	< 0.005	-	28.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.25	0.22	0.26	3.31	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	771	771	0.04	0.03	0.07	780
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	_	624	624	0.03	0.09	0.04	651
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	0.04	0.04	0.05	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	_	132	132	0.01	< 0.005	0.20	133
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	105	105	< 0.005	0.01	0.12	110
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	_	21.8	21.8	< 0.005	< 0.005	0.03	22.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	17.4	17.4	< 0.005	< 0.005	0.02	18.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

## 3.4. Building Construction (2026) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.32	3.17	6.09	0.01	0.10	_	0.10	0.09	_	0.09	_	1,007	1,007	0.04	0.01	_	1,011
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 Equipmen		0.05	0.53	1.03	< 0.005	0.02	_	0.02	0.02	_	0.02	_	170	170	0.01	< 0.005	_	170
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 Equipmen		0.01	0.10	0.19	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	28.1	28.1	< 0.005	< 0.005	_	28.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.25	0.22	0.26	3.31	0.00	0.00	0.78	0.78	0.00	0.18	0.18	_	771	771	0.04	0.03	0.07	780
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	_	624	624	0.03	0.09	0.04	651
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	0.04	0.04	0.05	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	_	132	132	0.01	< 0.005	0.20	133
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	105	105	< 0.005	0.01	0.12	110
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	_	21.8	21.8	< 0.005	< 0.005	0.03	22.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	17.4	17.4	< 0.005	< 0.005	0.02	18.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

## 3.5. Paving (2026) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	<u> </u>	_	<u> </u>	_	_	_	<u> </u>	_	_	_	<u> </u>	_	_	<u> </u>	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_
Off-Road Equipmen		0.32	3.05	4.24	0.01	0.14	_	0.14	0.13	_	0.13	_	645	645	0.03	0.01	_	648
Paving	_	0.40	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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 Equipmen		0.32	3.05	4.24	0.01	0.14	_	0.14	0.13	_	0.13	-	645	645	0.03	0.01	-	648
Paving	_	0.40	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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 Equipmen		0.02	0.17	0.23	< 0.005	0.01	_	0.01	0.01	_	0.01	-	35.4	35.4	< 0.005	< 0.005	-	35.5
Paving	_	0.02	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen	< 0.005 t	< 0.005	0.03	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.85	5.85	< 0.005	< 0.005	_	5.87
Paving	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	-	_		_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
/endor	0.00	0.00	0.00	0.00	0.00	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

## 3.6. Paving (2026) - Mitigated

				y, torryr								D000	NDCCC	COOT	OU4	NOO	Б.	000-
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.32	3.05	4.24	0.01	0.14	_	0.14	0.13	_	0.13	_	645	645	0.03	0.01	_	648
Paving	_	0.40	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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 Equipmen		0.32	3.05	4.24	0.01	0.14	_	0.14	0.13	_	0.13	_	645	645	0.03	0.01	_	648

Paving	_	0.40			<del></del>	_	_	-	_	_	<del>-</del>	-	-	_	<del>-</del>	_	_	
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 Equipmen		0.02	0.17	0.23	< 0.005	0.01	_	0.01	0.01	_	0.01	_	35.4	35.4	< 0.005	< 0.005	_	35.5
Paving	_	0.02	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen	< 0.005 t	< 0.005	0.03	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	5.85	5.85	< 0.005	< 0.005	_	5.87
Paving	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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

## 3.7. Architectural Coating (2026) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_		_	_	_		_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.28	2.44	3.04	< 0.005	0.05	_	0.05	0.05	_	0.05	_	415	415	0.02	< 0.005	_	416
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.07	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	11.4	11.4	< 0.005	< 0.005	_	11.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	-	< 0.005	-	1.88	1.88	< 0.005	< 0.005	_	1.89

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	-	_	_	_	_	_	_	_	_	_	_	-	-	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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	1_	0.00	0.00	0.00	0.00	0.00	0.00

## 3.8. Architectural Coating (2026) - Mitigated

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

Off-Road Equipmen		0.28	2.44	3.04	< 0.005	0.05	_	0.05	0.05	_	0.05	_	415	415	0.02	< 0.005	-	416
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.07	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	11.4	11.4	< 0.005	< 0.005	_	11.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	1.88	1.88	< 0.005	< 0.005	_	1.89
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
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

### 4.10. 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)

Vegetatio n	TOG	ROG	NOx	со	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

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_		_	_	_	_	_	_		_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	<u> </u>	_	_	_		_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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

Species	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Sequest	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetatio n	TOG	ROG		со	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	_	_	_	_	_	_	_	 _	_	_	_	_	 _	_	 _
iotai															

#### 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	со	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

Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 5. Activity Data

## 5.1. Construction Schedule

		0		S		
Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description

Building Construction	Building Construction	8/18/2025	3/27/2026	5.00	160	_
Paving	Paving	3/30/2026	4/24/2026	5.00	20.0	_
Architectural Coating	Architectural Coating	4/27/2026	5/8/2026	5.00	10.0	_

## 5.2. Off-Road Equipment

## 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Building Construction	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Architectural Coating	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31

### 5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Building Construction	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Architectural Coating	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	_	_	_	_
Building Construction	Worker	60.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	0.00	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	0.00	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
Building Construction	_	_	_	_
Building Construction	Worker	60.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT

Paving	_	_	_	_
Paving	Worker	0.00	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	0.00	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	Residential Exterior Area Coated	Non-Residential Interior Area	Non-Residential Exterior Area	Parking Area Coated (sq ft)
	(sq ft)	(sq ft)	Coated (sq ft)	Coated (sq ft)	

### 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Paving	0.00	0.00	0.00	0.00	3.08

### 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
City Park	0.00	0%
Parking Lot	3.08	100%

### 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2026	0.00	346	0.03	< 0.005

### 5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type       Initial Acres       Final Acres
--

### 5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
21	, , , , , , , , , , , , , , , , , , ,		

### 5.18.1. Biomass Cover Type

### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

#### 5.18.1.2. Mitigated

Biomass Cover Type Initial Acres Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

#### 5.18.2.2. Mitigated

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

### 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.24	annual days of extreme heat
Extreme Precipitation	4.10	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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

#### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	2	1
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	2	1
Wildfire	1	1	2	1
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	5	1	2	3

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	1	1	3	1
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	2	1
Wildfire	1	1	2	1
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	4	1	2	3
-------------------------	---	---	---	---

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

#### 6.4.1. Temperature and Extreme Heat

User Selected Measures	Co-Benefits Achieved	Exposure Reduction	Sensitivity Reduction	Adaptive Capacity Increase
D-3: Install Drought Resistant Landscaping	Water Conservation	_	1.00	1.00
EH-1: Install Green Infrastructure	Energy and Fuel Savings, Improved Air Quality, Improved Ecosystem Health, Improved Public Health, Social Equity	1.00	1.00	
EH-10: Install Covered Parking	Improved Air Quality, Improved Public Health	_	_	1.00

#### 6.4.2. Air Quality Degradation

User Selected Measures	Co-Benefits Achieved	Exposure Reduction	Sensitivity Reduction	Adaptive Capacity Increase
	Energy and Fuel Savings, Improved Air Quality, Improved Ecosystem Health, Improved Public Health, Social Equity	1.00	1.00	_

## 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	20.8
AQ-PM	67.6
AQ-DPM	97.6
Drinking Water	34.7
Lead Risk Housing	29.3
Pesticides	0.00
Toxic Releases	97.3
Traffic	58.0
Effect Indicators	_
CleanUp Sites	44.8
Groundwater	57.2
Haz Waste Facilities/Generators	82.4
Impaired Water Bodies	90.1
Solid Waste	93.8
Sensitive Population	_
Asthma	85.4
Cardio-vascular	69.4
Low Birth Weights	97.9
Socioeconomic Factor Indicators	_
Education	10.3
Housing	56.9
Linguistic	25.6
Poverty	22.0
Unemployment	35.0

## 7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	_
Above Poverty	69.69074811
Employed	74.38727063
Median HI	57.21801617
Education	_
Bachelor's or higher	85.98742461
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	_
Auto Access	24.21403824
Active commuting	86.05158476
Social	_
2-parent households	79.76389067
Voting	1.642499679
Neighborhood	_
Alcohol availability	18.95290645
Park access	34.38983703
Retail density	97.9468754
Supermarket access	80.63646863
Tree canopy	12.11343513
Housing	_
Homeownership	28.02515078
Housing habitability	35.67303991
Low-inc homeowner severe housing cost burden	62.91543693
Low-inc renter severe housing cost burden	60.00256641
Uncrowded housing	39.26600796

_
67.86860003
88.7
13.3
71.3
47.4
88.8
81.5
89.8
86.4
34.9
48.3
46.5
33.5
80.9
85.5
67.3
74.1
86.2
84.7
_
11.9
75.7
89.3
_
0.0
15.8

Children	44.4
Elderly	32.8
English Speaking	56.8
Foreign-born	60.8
Outdoor Workers	91.7
Climate Change Adaptive Capacity	_
Impervious Surface Cover	2.8
Traffic Density	49.7
Traffic Access	87.4
Other Indices	_
Hardship	9.2
Other Decision Support	_
2016 Voting	19.7

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	78.0
Healthy Places Index Score for Project Location (b)	62.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	Wilmington Long Beach Carson

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.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

#### 7.5. Evaluation Scorecard

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.

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
Construction: Construction Phases	Anticipated schedule
Construction: Off-Road Equipment	Assumed construction equipment
Construction: Trips and VMT	30 workers per day