



**Air Quality Study for 0537-161-19**

November 11, 2024

**Prepared for:**

YEWT

**Prepared by:**

Elevated Entitlements  
5716 Corsa Ave. #201  
Westlake Village, CA, 91362



## 1.0 INTRODUCTION

This report presents an assessment of potential air quality and greenhouse gas (GHG) impacts associated with the proposed development of a 12.47-acre vacant parcel located off Calico Boulevard in the community of Yermo within the County of San Bernardino (the "Project"). The proposed project requests a zone change From Rural Living to Highway Commercial to allow for the installation of superchargers and associated AC and DC equipment and the development of future retail with associated parking. The project site is located at Calico Road and Calico Boulevard off I-15. There is existing Highway Commercial use to the west, residential uses to the south, and vacant land to the north and east.

AREA DISTURBED	CONSTRUCTION SUMMARY	NUMBER OF NEW CHARGING STALLS	TOTAL NEW BUILDING AREA
11.65 Acres	Installation of electric car charging stations, street improvements, and retail spaces	479	40,670 Square Feet

GHG impacts will be attributable to emissions associated with construction and operation emissions including traffic and energy use. This report presents an evaluation of existing conditions at the subject property, thresholds of significance, and potential air quality and GHG impacts associated with the construction and operation of the Project.

## 2.0 EXISTING CONDITIONS

### 2.1 CURRENT DEVELOPMENT

The subject property is currently undeveloped land. The project parcel is currently zoned Rural Living (RL) and abuts properties zoned Highway Commercial (CH) to the west and Low Density Residential (LDR) to the south. The proposed project would have a positive economic impact to the growth and development of the unincorporated areas of San Bernardino County, which meets Goal LU-6 of the San Bernardino General Plan. In addition, the proposed project would create new jobs, reduce reliance on combustion vehicles, and reduce overall greenhouse gas emissions, while providing a regional electric vehicle charging hub to the local community and passerby transients. Overall, this project will meet the State of California and County of San Bernardino's Climate Action Plan goals and policies.

Figure 1: Project Site Aerial



Figure 2: Viewing the Property from the northwest oriented to the southeast



## **2.2 REGULATORY SETTING**

The United States Environmental Protection Agency (EPA) defines air quality by ambient air concentrations of specific pollutants that have been shown to be of concern with respect to health and welfare of the general public. The EPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the EPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated.

In response, the EPA established both primary and secondary standards for several pollutants (called "criteria" pollutants). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere.

The Federal CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. More stringent California Ambient Air Quality Standards (CAAQS) have been adapted by the California Air Resources Board (ARB) for the six criteria pollutants through the California Clean Air Act of 1988 (CCAA). The CCAA also established California Ambient Air Quality Standards (CAAQS) for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles (see Table 1 for NAAQS and CAAQS.)

Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be "Nonattainment Areas" for that pollutant. In September 1997, the EPA promulgated 8-hour O<sub>3</sub> and 24-hour and annual PM<sub>2.5</sub> national standards. As a result, this action has initiated a new planning process to monitor and evaluate emission control measures for these pollutants.

Under CEQA, the Mojave Desert Air Quality Management District (MDAQMD) (the "District") is an expert commenting agency on air quality and related matters within its jurisdiction or impacting on its jurisdiction. Under the Federal Clean Air Act the District has adopted federal attainment plans for ozone and PM<sub>10</sub>. The District has dedicated assets to reviewing projects to ensure that they will not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan. These Guidelines are intended to assist persons preparing environmental analysis or review documents for any project within the jurisdiction of the District by providing background information and guidance on the preferred analysis approach.

The California ARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The ARB is responsible for the development, adoption, and enforcement of the state's motor vehicle emissions program, as well as the adoption of the CAAQS. The ARB also reviews operations and programs of the local air districts and requires each air district with jurisdiction over a nonattainment area to develop its own strategy for achieving the NAAQS and CAAQS.

## **Air Quality Study for 0537-161-19**

November 11, 2024



The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The Mojave Desert Air Quality Management District (MDAQMD) is the local agency responsible for the administration and enforcement of air quality regulations for the Mojave Desert Air Basin (MDAB).

The MDAQMD and the Southern California Association of Governments (SCAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the MDAB. Air Quality Standards were adopted in 1982, and most recently updated in 2024. The most recently adopted air quality plan in the MDAB is the Air Quality Management Plan (AQMP), which was adopted by the Board in 2024.

Table 1 presents a summary of the ambient air quality standards adopted by the federal and California Clean Air Acts.

**Table 1: Ambient Air Quality Standards**

POLLUTANT	AVERAGE TIME	CALIFORNIA STANDARDS CONCENTRATION	CALIFORNIA STANDARDS METHODS	NATIONAL STANDARDS PRIMARY	NATIONAL STANDARDS SECONDARY	NATIONAL STANDARDS METHOD
Ozone (O3)	1 hour	0.09 ppm (180 µg/m3)	Ultraviolet Photometry			Ultraviolet Photometry
	8 hour	0.070 ppm (137 µg/m3)		0.075 ppm (147 µg/m3)	0.075 ppm (147 µg/m3)	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 µg/m3)	—	Non-Dispersive Infrared Spectroscopy (NDIR)
	8 Hour	9.0 ppm (10 mg/m3)		9 ppm (10 µg/m3)	—	
Nitrogen Dioxide (NO2)	Annual	0.030 ppm (56 µg/m3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m3)		Gas Phase Chemiluminescence
	1 hour	0.18 ppm (338 µg/m3)		0.100 ppm (188 µg/m3)		
Sulfur Dioxide (SO2)	24 hours	0.04 ppm (105 µg/m3)	Ultraviolet Fluorescence			Pararosaniline
	3 hours	--			0.5 ppm (1300 µg/m3)	
	1 hour	0.25 ppm (655 µg/m3)		0.075 ppm (196 µg/m3)		
Respirable Particulate Matter (PM10)	24 hours	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	150 µg/m3	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3				
Fine Particulate Matter (PM2.5)	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	12.0 µg/m3	15 µg/m3	Inertial Separation and Gravimetric Analysis
	24 hours			35 µg/m3		
Sulfates	24 hours	25 µg/m3	Ion Chromatography	No National Standards		
Lead	30-day Average	1.5 µg/m3	Atomic Absorption			Atomic Absorption
	Calendar Quarter			1.5 µg/m3	1.5 µg/m3	
	3-Month Rolling			0.15 µg/m3	0.15 µg/m3	
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence	No National Standards		
Vinyl Chloride	24 hours	0.010 ppm (26 µg/m3)	Gas Chromatography	No National Standards		

### 3.0 THRESHOLDS OF SIGNIFICANCE

As defined by the MDAQMD, any project is significant if it triggers or exceeds the most appropriate evaluation criteria. The District will clarify upon request which threshold is most appropriate for a given project; in general, the emissions comparison (criteria number 1) is sufficient: 1. Generates total emissions (direct and indirect) in excess of the thresholds given in Table 4; 2. Generates a violation of any ambient air quality standard when added to the local background; 3. Does not conform with the applicable attainment or maintenance plan(s) **1**; 4. Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1. A significant project must incorporate mitigation sufficiently to reduce its impact to a level that is not significant or less than significant. A project that cannot be mitigated to a level that is less than significant must incorporate all feasible mitigation. Note that the emission thresholds are given as a daily value and an annual value, so that multi-phased project (such as project with a construction phase and a separate operational phase) with phases shorter than one year can be compared to the daily value.

The project-level numerical thresholds are summarized in Table 2.

**Table 2: MDAQMD Significant Thresholds**

POLLUTANT	DAILY THRESHOLD	ANNUAL THRESHOLD
NOx	137 lbs./day	25 tons/year
ROG (VOC)	137 lbs./day	25 tons/year
PM10	82 lbs./day	15 tons/year
PM2.5	65 lbs./day	12 tons/year
SOx	137 lbs./day	25 tons/year
CO	548 lbs./day	100 tons/year
Lead	3 lbs./day	0.6 tons/year
CO2e	548,000 lbs./day	100,000 tons/year

Mojave Desert AQMD Attainment Status					
Pollutant	Averaging Time	California Standards		Federal Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O <sub>3</sub> )	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Non-attainment	-	Non-attainment*
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.070 ppm (137 µg/m <sup>3</sup> )	
Respirable Particulate Matter (PM <sub>10</sub> )	24 Hour	50 µg/m <sup>3</sup>	Non-attainment	150 µg/m <sup>3</sup>	Non-attainment***
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		-	
Fine Particulate Matter (PM <sub>2.5</sub> )	24 Hour	No State Standard		35 µg/m <sup>3</sup>	Unclassified/Attainment
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Non-attainment*	12 µg/m <sup>3</sup>	
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	Attainment	9 ppm (10 mg/m <sup>3</sup> )	Unclassified/Attainment
	1 Hour	20 ppm (23 mg/m <sup>3</sup> )		35 ppm (40 mg/m <sup>3</sup> )	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.030 ppb (57 µg/m <sup>3</sup> )	Attainment	0.053 ppm (100 µg/m <sup>3</sup> )	Unclassified/Attainment
	1 Hour	0.18 ppm (330 µg/m <sup>3</sup> )		100 ppm (196 µg/m <sup>3</sup> )	
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean	-	Attainment	0.030 ppm (80 µg/m <sup>3</sup> )	Unclassified/Attainment
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (365 µg/m <sup>3</sup> )	
	3 Hour	-		0.5 ppm (1300 µg/m <sup>3</sup> )	
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )		75 ppb (196 µg/m <sup>3</sup> )	
Lead (Pb)	30 Day Average	1.5 µg/m <sup>3</sup>	Attainment	-	Unclassified/Attainment
	Calendar Quarter	-		1.5 µg/m <sup>3</sup>	
	Rolling 3-Month Average	-		0.15 µg/m <sup>3</sup>	
Visibility Reducing Particles	8 Hour	Extinction Coefficient of 0.24 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent	Unclassified	No Federal Standards	
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Non-attainment**		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Unclassified		

\*Southwest corner of desert portion of San Bernardino County only  
 \*\*Searles Valley (northwest corner of San Bernardino County) only  
 \*\*\*San Bernardino County portion only

## **4.0 IMPACTS**

The proposed electrical charging stations and retail spaces may cause temporary air quality impacts from construction, and minimal impacts during operations. Temporary construction impacts include emissions associated with site grading/preparation, construction, paving and utilities installation. Operational impacts will cause less than significant impacts due to offsets created from the solar canopies as well as the electric vehicle charging stations. The site will predominantly be utilized by electric vehicles to charge as they travel through the I-15.

### **4.1 CONSTRUCTION**

Emissions of pollutants such as fugitive dust that are generated during construction are generally highest near the construction site. Emissions from the construction phase of the Project were estimated through the use of the CalEEMod Model (ENVIRON 2020.4.0). It was assumed that heavy construction equipment would be operating at the site for eight hours per day, five days per week during project construction. In addition, it was assumed that, in accordance with the requirements of the MDAQMD Rule 403, fugitive dust controls would be utilized during construction, including watering of active sites two times daily.

Table 3 provides a summary of the emission estimates for construction of all proposed site improvements. These projected emissions assume standard measures are implemented to reduce emissions, as calculated with the CalEEMod Model, and are compared to the regional thresholds. Refer to Appendix A for detailed model output files.

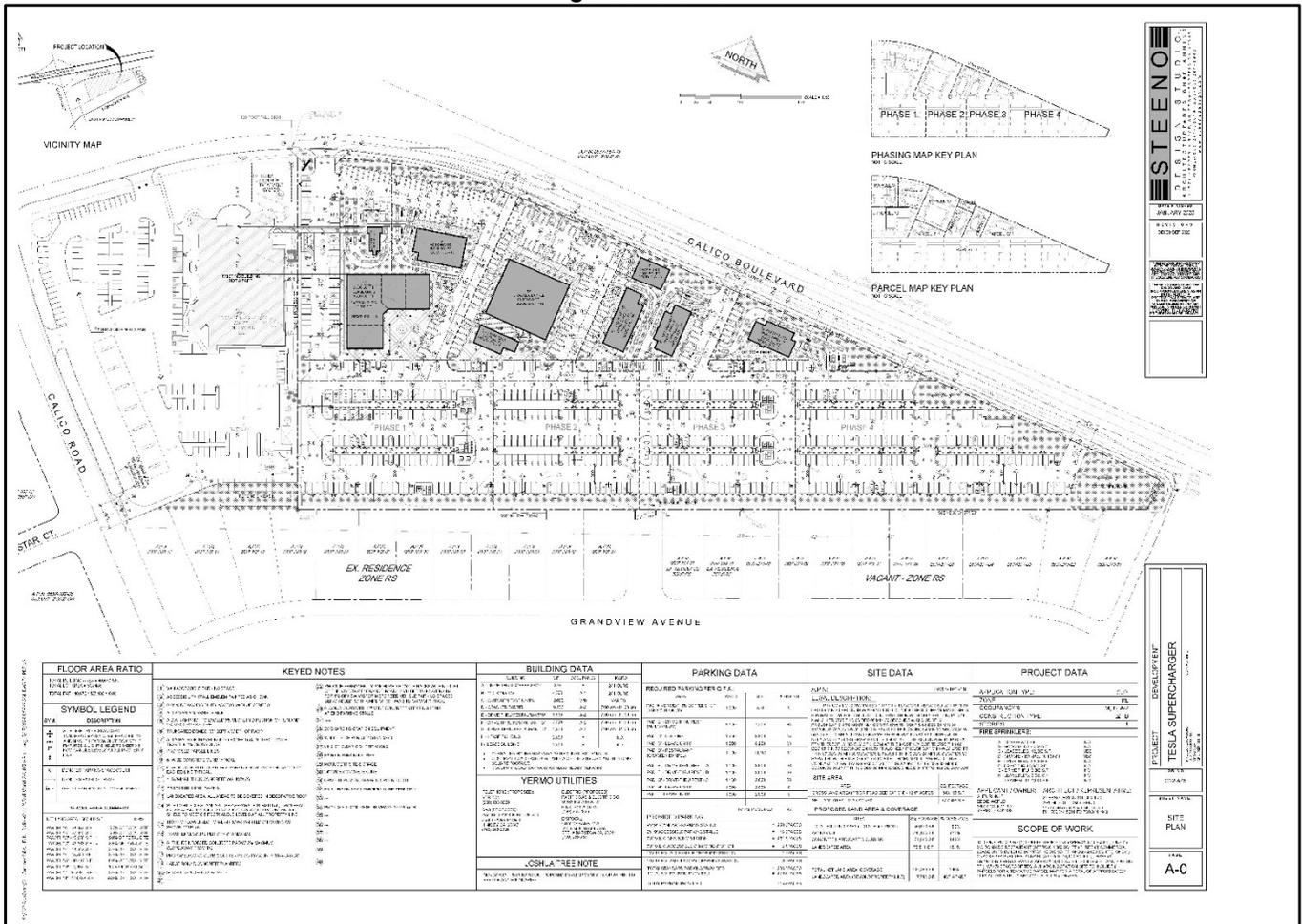
Table 3 includes projected emissions for all steps of construction, averaged over the Project's projected construction duration. These steps include Site Preparation and Building Construction (Including Installation of Electrical Vehicle Charging Stations). Note that projected emissions for all pollutants during construction are below the MDAQMD's Air Quality Significance Thresholds.

During Construction diesel-fired equipment will be operated and will result in the release of diesel particulate matter which is a listed carcinogen and toxic air contaminant in the State of California. Project construction would not result in emission of any odor compounds that would cause a nuisance or significant impact to nearby receptors. The impacts associated with project construction are therefore not considered significant with regard to odors.

**Table 3:**  
**Estimated Annual Construction Emissions (Annual, Unmitigated) tons/year**

EMISSION SOURCE	ROG	NOx	CO	SOx	PM10	PM2.5	CO2e
Regional Significance Criteria	25	25	100	137	15	12	100,000
Project Construction Emissions	0.52	3.165	3.795	<0.005	0.405	0.235	708.22
Significant?	No	No	No	No	No	No	No

**Figure 3: Site Plan**



## **4.2 OPERATION**

The project would operate twenty-four hours a day, seven days a week. The proposed project will include 461 standard electric vehicle (EV) charging stalls, 1 proposed accessible van EV charging stall, 8 proposed accessible standard EV charging stalls, 9 proposed accessible ambulatory EV charging stalls, for a total of approximately 479 proposed EV charging stalls. The project will maintain 28-foot drive aisle widths and 30 feet drive aisles for proper circulation. There will be no employees for the supercharger use or maintenance, however a number of employees will be hired for the future adjoining retail use. The goals and objectives of the proposed project are to provide clean, renewable, electric charging capability to EV vehicles along the heavily traveled I-15 corridor. The proposed project's goal is to accelerate the advent of clean transport and clean energy production. At the same time, creating a destination for retail, rest stop, and walkable outdoor lifestyle center in the Yermo community.

The project will generate approximately 761 trips per day according to David Evan and Associates (DEA) Traffic Study. However, as the site is primarily a electrical vehicle Charging Station, the majority of these stops will be from electric vehicles. As such the CalEEMod would not accurately portray CO levels produced from the project. Thus, the CalEEMod results were ran on a bases of 300 trips per day to accommodate the electric vehicles.

Land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. As these land uses are not proposed for this project, odor impacts would not less than significant.

## **4.3 PROJECT'S CONTRIBUTION TO CRITERIA POLLUTANTS**

Pursuant to the Sierra Club v. Friant Ranch Supreme Court Ruling (Case No. S219783, December 24, 2018), which found on page 6 of the ruling that EIRs need to "makes a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." Also, on page 24 of the ruling it states "The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the project's impact on the days of nonattainment per year."

The Air Basin has been designated by EPA for the national standards as a non-attainment area for O<sub>3</sub>, PM<sub>10</sub>, and partial non-attainment for lead. In addition, PM<sub>2.5</sub> has been designated by the State as non-attainment. It should be noted that VOC and NO<sub>x</sub> are O<sub>3</sub> precursors, as such they have been considered as non-attainment pollutants. According to the California Air Resources Board, the total emissions in the Mojave Desert Air Basin in 2020 were 19,053 tons of VOC, 67,014 tons of NO<sub>x</sub>, 40,588 tons of CO, 1,606 tons of SO<sub>x</sub>, 79,825.5 tons of PM<sub>10</sub> and 9,307.5 tons of PM<sub>2.5</sub>. These numbers were calculated by multiplying the recorded daily figures by 365 for comparison with the Project's annual emissions. The Project contribution to each criteria pollutant in the Mojave Desert Air Basin is shown below.

**Table 4:  
Project's Contribution to Criteria Pollutants in the Mojave Desert Air Basin**

EMISSIONS SOURCE	ANNUAL EMISSIONS (TONS/YEAR)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub> <sup>3</sup>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Emissions <sup>1</sup>	0.52	3.165	3.795	<0.005	0.405	0.235
Operation Emissions <sup>1</sup>	617.50	486.50	3,480.0	8.0	730.0	189.0
Total Project Emissions <sup>1</sup>	618.02	489.67	3,483.8	8.005	730.41	189.24
Total Emissions in Air Basin <sup>2</sup>	19,053	67,014	40,588	1,606	79,825.5	9,307.5
Project's Percent of Air Emissions	0.032%	0.007%	0.086%	0.005%	0.009%	0.02%

Notes:

1. From the Project's total emissions estimated in CalEEMod.
2. Source: California Air Resources Board, 2023. Tons per year, 2020.
3. SO<sub>2</sub> results from CalEEMod are reflected under SO<sub>x</sub>.

## 5.0 GREENHOUSE GAS EVALUATION

According to the California Natural Resources Agency, "due to the global nature of GHG emissions and their potential effects, GHG emissions will typically be addressed in a cumulative impacts analysis." According to Appendix G of the CEQA Guidelines, the following criteria may be considered to establish the significance of GHG emissions:

Would the project:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As discussed in Section 15064.4 of the CEQA Guidelines, the determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency, consistent with the provisions in Section 15064. Section 15064.4 further provides that a lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model

November 11, 2024

or methodology selected for use; and/or

- Rely on a qualitative analysis or performance-based standards.

Section 15064.4 also advises a lead agency to consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

The proposed project will have a negligible release of greenhouse gases due to its 479 electric vehicle charging stations. In the long run, the Project will reduce on-road emissions, by increasing access to electric vehicle (EV) charging offsetting emissions related to the Project's construction and operation.

Based on the results of the CalEEMod Model, the project would generate 15,291 metric tons of CO<sub>2</sub>e emissions annually from operations beneath the regional significance threshold of 100,000 tons. Therefore, the impacts are less than significant.

## **6.0 CONCLUSIONS**

The Air Quality and GHG Analysis for the proposed project in San Bernardino County, California evaluated emissions associated with both the construction and operation. Emissions associated with construction and operation were compared with significance thresholds developed by the MDAQMD, which provide a conservative means of evaluating whether project emissions would cause a significant impact on the ambient air quality or whether further evaluation is warranted. Emissions associated with construction and operation of the project are below the significance thresholds for all criteria pollutants as well as cumulative GHG emissions. Thus, the emissions associated with construction and operation of the project would not result in a significant impact under the California Environmental Quality Act.

**Air Quality Study for 0537-161-19**

November 11, 2024



## 7.0 CEQA ENVIRONMENTAL CHECKLIST

### AIR QUALITY

Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>AIR QUALITY: Would the Project:</b>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project falls under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD) and is located in the Mojave Desert Air Basin (MDAB). The Air Quality Management Plan (AQMP) aims to obtain attainment status for key monitored air pollution standards, based on current and future air pollution emissions resulting from employment and residential growth projections. To develop the AQMP, various agencies' General Plans and other projections for population and employment growth are taken into consideration. During project construction, emissions with regional effects are calculated using the California Emissions Estimator Model (CalEEMod); Version 2022.1.1.28 and would not exceed criteria pollutant thresholds established by the MDAQMD.

The project is expected to have a minimal impact on the air quality of the area and would produce relatively few emissions during construction (an eighteen month period) and negligible emissions during operation. In addition, the development of electrical vehicle charging stations is expected to produce cumulative and regional environmental benefits. Therefore, impacts are considered less than significant. Table 5 below presents the regional air quality significance thresholds.

**Table 5**  
**Project's Contribution to Criteria Pollutants in the Mojave Desert Air Basin**

EMISSIONS SOURCE	ANNUAL EMISSIONS (TONS/YEAR)					
	VOC	NOx	CO	SOx <sup>3</sup>	PM10	PM2.5
Construction Emissions <sup>1</sup>	0.52	3.165	3.795	<0.005	0.405	0.235
Operation Emissions <sup>1</sup>	12.3	9.73	69.6	0.16	14.6	3.78
Total Project Emissions <sup>1</sup>	12.82	12.895	73.395	0.165	15.005	4.015
Total Emissions in Air Basin <sup>2</sup>	19,053	67,014	40,588	1,606	79,825.5	9,307.5
Project's Percent of Air Emissions	0.0007%	0.0002%	0.0018%	<0.0001%	0.0002%	0.0004%

Notes:

1. From the Project's total emissions estimated in CalEEMod.
2. Source: California Air Resources Board, 2023. Tons per year, 2020.
3. SO2 results from CalEEMod are reflected under SOx.

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

**Less Than Significant Impact.** As shown in Table 5 emissions from construction of the project would be below MDAQMD air quality significance thresholds for all pollutants. Based on this, the project would not be expected to conflict with or obstruct implementation of the AQMP. There would be no expected conflict or obstruction of any air quality plans. Most of the polluting emissions would be produced during the temporary construction period. These emissions would be in the form of exhaust and dust. The amount of exhaust associated with the project would be negligible compared to the yearly exhaust levels of San Bernardino County.

The project is located within the MDAQMD which is non-attainment for ozone and PM10. The MDAQMD has adopted federal attainment plans (1995 for PM10 and 2004 for ozone) for these two pollutants. The project is expected to generate minor particulate and ozone precursors during the approximately eighteen month construction period. However, these would be less than or roughly equal to pollutants generated by other land uses for this property such as farming (farrowing, plowing, etc.). Best Management Practices for the project shall include use of water trucks to reduce particulate emissions during construction. In addition, a Dust Control Plan shall be developed and submitted to the County and MDAQMD for review and approval prior to issuance of a grading permit and/or land disturbance.

b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

**Less Than Significant Impact.** Emissions from operations of the project would be below the levels produced during construction and in effect, the air quality significance thresholds for all pollutants. Specifically, the project would not exceed MDAQMD significance thresholds for ozone precursors pollutants, VOC and NOx, as well as PM<sub>10</sub> and PM<sub>2.5</sub> for which the Mojave Desert Air Basin (MDAB) is in non-attainment. Since the project's emissions are below the MDAQMD's project-specific thresholds, the project emissions would not be cumulatively considerable, and impacts would be less than significant.

*c) Expose sensitive receptors to substantial pollutant concentrations?*

**Less Than Significant Impact.** Sensitive receptors are defined as populations that are more susceptible to the effects of pollution than the population at large. The MDAQMD identifies the following as sensitive receptors: residences, schools, daycare centers, playgrounds, and medical facilities. The project is bordered by a few residential homes to the south. All pollutant levels for the project are below the significance thresholds as defined by MDAQMD and CalEEMod. The only potential impacts to the surrounding sensitive receptors would be dust pollutants during the construction phase. A Dust Control Plan shall be developed and submitted to the County and MDAQMD for review and approval prior to issuance of a grading permit and/or land disturbance to reduce any potential impacts to less than significant. Overall, the project would not expose any sensitive receptors to substantial pollutant concentrations and a less than significant impact would occur.

*d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

**Less Than Significant Impact.** During construction, diesel equipment operating at the site may generate some nuisance odors; however, due to the distance of sensitive receptors to the project site and the temporary nature of construction, odors associated with project construction would not be significant.

Land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. These land uses are not proposed for this project. Overall, odor impacts would be less than significant.

## 8.0 REFERENCES

Association of Environmental Professionals. 2007. Recommendations by the Association of Environmental Professionals (AEP) on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents. June.

California Air Pollution Control Officers Association. 2008. CEQA and Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. January.

California Air Resources Board. 2023. EMFAC2014 Emissions Model.

California Air Resources Board. 2008. Climate Change Scoping Plan. November.

ENVIRON. 2020. CalEEMod Model, Version 2022.1.1.28

MDAQMD. 2020. MDAQMD CEQA Guidelines.

MDAQMD. 2009. LST Look-up Tables.

MDAQMD. 2014. CEQA Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/mdaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>

U.S. EPA. 2006. The U.S. Inventory of Greenhouse Gas Emissions and Sinks: Fast Facts. [www.epa.gov/climatechange/emissions/downloads06/06FastFact](http://www.epa.gov/climatechange/emissions/downloads06/06FastFact)

# Eddie World 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. Site Preparation (2025) - Unmitigated
  - 3.2. Site Preparation (2025) - Mitigated
  - 3.3. Grading (2025) - Unmitigated

- 3.4. Grading (2025) - Mitigated
- 3.5. Building Construction (2025) - Unmitigated
- 3.6. Building Construction (2025) - Mitigated
- 3.7. Building Construction (2026) - Unmitigated
- 3.8. Building Construction (2026) - Mitigated
- 3.9. Paving (2026) - Unmitigated
- 3.10. Paving (2026) - Mitigated
- 3.11. Architectural Coating (2026) - Unmitigated
- 3.12. Architectural Coating (2026) - Mitigated
- 3.13. Architectural Coating (2027) - Unmitigated
- 3.14. Architectural Coating (2027) - Mitigated
- 4. Operations Emissions Details
  - 4.1. Mobile Emissions by Land Use
    - 4.1.1. Unmitigated
    - 4.1.2. Mitigated
  - 4.2. Energy
    - 4.2.1. Electricity Emissions By Land Use - Unmitigated
    - 4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

- 5.3.1. Unmitigated
- 5.3.2. Mitigated
- 5.4. Vehicles
  - 5.4.1. Construction Vehicle Control Strategies
- 5.5. Architectural Coatings
- 5.6. Dust Mitigation
  - 5.6.1. Construction Earthmoving Activities
  - 5.6.2. Construction Earthmoving Control Strategies
- 5.7. Construction Paving
- 5.8. Construction Electricity Consumption and Emissions Factors
- 5.9. Operational Mobile Sources
  - 5.9.1. Unmitigated
  - 5.9.2. Mitigated
- 5.10. Operational Area Sources
  - 5.10.1. Hearths
    - 5.10.1.1. Unmitigated
    - 5.10.1.2. Mitigated
  - 5.10.2. Architectural Coatings

- 5.10.3. Landscape Equipment
- 5.10.4. Landscape Equipment - Mitigated
- 5.11. Operational Energy Consumption
  - 5.11.1. Unmitigated
  - 5.11.2. Mitigated
- 5.12. Operational Water and Wastewater Consumption
  - 5.12.1. Unmitigated
  - 5.12.2. Mitigated
- 5.13. Operational Waste Generation
  - 5.13.1. Unmitigated
  - 5.13.2. Mitigated
- 5.14. Operational Refrigeration and Air Conditioning Equipment
  - 5.14.1. Unmitigated
  - 5.14.2. Mitigated
- 5.15. Operational Off-Road Equipment
  - 5.15.1. Unmitigated
  - 5.15.2. Mitigated
- 5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

- 7. Health and Equity Details
  - 7.1. CalEnviroScreen 4.0 Scores
  - 7.2. Healthy Places Index Scores
  - 7.3. Overall Health & Equity Scores
  - 7.4. Health & Equity Measures
  - 7.5. Evaluation Scorecard
  - 7.6. Health & Equity Custom Measures
- 8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Eddie World
Construction Start Date	8/12/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	8.20
Location	34.9080185314965, -116.83357776882555
County	San Bernardino-Mojave Desert
City	Unincorporated
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5111
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.28

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Regional Shopping Center	79.1	1000sqft	1.82	40,670	38,406	—	—	—

Parking Lot	390	1000sqft	8.95	0.00	38,406	—	—
-------------	-----	----------	------	------	--------	---	---

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

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-8	Use Renewable Diesel
Construction	C-13	Use Low-VOC Paints for Construction
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Energy	E-2	Require Energy Efficient Appliances
Water	W-4	Require Low-Flow Water Fixtures
Area Sources	AS-2	Use Low-VOC Paints

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

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.98	6.72	62.0	61.7	0.11	2.61	11.9	14.5	2.40	5.51	7.91	—	12,911	12,911	0.50	0.19	3.01	12,983
Mit.	7.98	6.72	62.0	61.7	0.11	2.61	11.9	14.5	2.40	5.51	7.91	—	12,911	12,911	0.50	0.19	3.01	12,983
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.94	7.35	62.1	60.7	0.11	2.61	11.9	14.5	2.40	5.51	7.91	—	12,848	12,848	0.51	0.19	0.09	12,918
Mit.	7.94	6.68	62.1	60.7	0.11	2.61	11.9	14.5	2.40	5.51	7.91	—	12,848	12,848	0.51	0.19	0.09	12,918



2025	1.17	0.98	9.05	9.33	0.02	0.38	1.33	1.71	0.35	0.59	0.93	—	2,036	2,036	0.08	0.03	0.26	2,048
2026	1.96	1.78	8.29	11.5	0.02	0.32	0.19	0.51	0.29	0.05	0.34	—	2,214	2,214	0.08	0.04	0.40	2,228
2027	0.04	0.04	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.31
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.21	0.18	1.65	1.70	< 0.005	0.07	0.24	0.31	0.06	0.11	0.17	—	337	337	0.01	0.01	0.04	339
2026	0.36	0.33	1.51	2.09	< 0.005	0.06	0.04	0.09	0.05	0.01	0.06	—	366	366	0.01	0.01	0.07	369
2027	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22

### 2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	7.98	6.72	62.0	61.7	0.11	2.61	11.9	14.5	2.40	5.51	7.91	—	12,911	12,911	0.50	0.19	3.01	12,983
2026	2.73	2.37	17.3	25.2	0.04	0.70	0.42	1.12	0.65	0.10	0.75	—	4,517	4,517	0.18	0.07	1.88	4,545
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	7.94	6.68	62.1	60.7	0.11	2.61	11.9	14.5	2.40	5.51	7.91	—	12,848	12,848	0.51	0.19	0.09	12,918
2026	5.22	4.82	18.2	25.7	0.04	0.72	0.46	1.18	0.67	0.11	0.78	—	4,637	4,637	0.17	0.08	0.05	4,664
2027	2.49	2.47	0.84	1.25	< 0.005	0.02	0.03	0.05	0.02	0.01	0.03	—	166	166	0.01	< 0.005	< 0.005	167
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.17	0.98	9.05	9.33	0.02	0.38	1.33	1.71	0.35	0.59	0.93	—	2,036	2,036	0.08	0.03	0.26	2,048
2026	1.55	1.38	8.29	11.5	0.02	0.32	0.19	0.51	0.29	0.05	0.34	—	2,214	2,214	0.08	0.04	0.40	2,228
2027	0.02	0.02	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.31
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.21	0.18	1.65	1.70	< 0.005	0.07	0.24	0.31	0.06	0.11	0.17	—	337	337	0.01	0.01	0.04	339
2026	0.36	0.33	1.51	2.09	< 0.005	0.06	0.04	0.09	0.05	0.01	0.06	—	366	366	0.01	0.01	0.07	369
2027	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22



## 2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	106	100	64.7	578	1.25	0.99	106	107	0.93	26.8	27.8	—	127,510	127,510	5.49	6.02	392	129,834
Area	1.30	1.27	0.01	1.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1,151	1,151	0.07	0.01	—	1,156
Water	—	—	—	—	—	—	—	—	—	—	—	11.2	59.7	70.9	1.15	0.03	—	108
Waste	—	—	—	—	—	—	—	—	—	—	—	44.7	0.00	44.7	4.47	0.00	—	157
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.20	0.20
Total	107	102	64.8	579	1.25	1.00	106	107	0.94	26.8	27.8	56.0	128,729	128,785	11.2	6.06	392	131,262
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	92.9	87.8	69.7	471	1.14	1.00	106	107	0.94	26.8	27.8	—	116,552	116,552	5.90	6.23	10.2	118,565
Area	0.98	0.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1,151	1,151	0.07	0.01	—	1,156
Water	—	—	—	—	—	—	—	—	—	—	—	11.2	59.7	70.9	1.15	0.03	—	108
Waste	—	—	—	—	—	—	—	—	—	—	—	44.7	0.00	44.7	4.47	0.00	—	157
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.20	0.20
Total	93.9	88.7	69.7	472	1.14	1.00	106	107	0.94	26.8	27.8	56.0	117,763	117,819	11.6	6.26	10.4	119,985
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	69.9	66.0	53.2	380	0.88	0.75	79.0	79.8	0.70	20.0	20.7	—	89,285	89,285	4.49	4.73	127	90,933
Area	1.14	1.13	0.01	0.87	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.59	3.59	< 0.005	< 0.005	—	3.60
Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1,151	1,151	0.07	0.01	—	1,156
Water	—	—	—	—	—	—	—	—	—	—	—	11.2	59.7	70.9	1.15	0.03	—	108
Waste	—	—	—	—	—	—	—	—	—	—	—	44.7	0.00	44.7	4.47	0.00	—	157



Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	—	1,144	1,144	0.07	0.01	—	1,148
Water	—	—	—	—	—	—	—	—	—	—	—	—	10.2	55.1	65.3	1.05	0.03	—	99.0
Waste	—	—	—	—	—	—	—	—	—	—	—	—	44.7	0.00	44.7	4.47	0.00	—	157
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.20	0.20
Total	93.9	88.7	69.7	472	1.14	1.00	106	107	0.94	26.8	27.8	54.9	117,751	117,805	11.5	6.26	10.4	119,968	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	69.9	66.0	53.2	380	0.88	0.75	79.0	79.8	0.70	20.0	20.7	—	89,285	89,285	4.49	4.73	127	90,933	
Area	1.10	1.09	0.01	0.87	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.59	3.59	< 0.005	< 0.005	—	3.60	
Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1,144	1,144	0.07	0.01	—	1,148	
Water	—	—	—	—	—	—	—	—	—	—	—	10.2	55.1	65.3	1.05	0.03	—	99.0	
Waste	—	—	—	—	—	—	—	—	—	—	—	44.7	0.00	44.7	4.47	0.00	—	157	
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.20	0.20	
Total	71.0	67.1	53.3	381	0.88	0.75	79.0	79.8	0.71	20.0	20.7	54.9	90,487	90,542	10.1	4.76	127	92,341	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.8	12.0	9.72	69.4	0.16	0.14	14.4	14.6	0.13	3.65	3.78	—	14,782	14,782	0.74	0.78	21.0	15,055	
Area	0.20	0.20	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.59	0.59	< 0.005	< 0.005	—	0.60	
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	189	189	0.01	< 0.005	—	190	
Water	—	—	—	—	—	—	—	—	—	—	—	1.69	9.12	10.8	0.17	< 0.005	—	16.4	
Waste	—	—	—	—	—	—	—	—	—	—	—	7.41	0.00	7.41	0.74	0.00	—	25.9	
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03	
Total	13.0	12.2	9.73	69.6	0.16	0.14	14.4	14.6	0.13	3.65	3.78	9.09	14,981	14,990	1.67	0.79	21.1	15,288	

### 3. Construction Emissions Details

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

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

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







Dust From Material Movement	—	—	—	—	—	0.63	0.63	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.60	2.48	< 0.005	0.11	—	0.10	—	0.11	0.10	—	435	435	0.02	< 0.005	—	—	—	437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	0.11	0.11	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.47	0.45	< 0.005	0.02	—	0.02	—	0.02	0.02	—	72.1	72.1	< 0.005	< 0.005	—	—	—	72.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.10	0.10	0.08	1.45	0.00	0.23	0.23	0.05	0.05	0.00	0.00	—	255	255	0.01	0.01	0.93	0.00	0.00	259
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	0.98	0.00	0.23	0.23	0.05	0.05	0.00	0.00	—	226	226	0.01	0.01	0.02	0.00	0.00	229
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00













Worker	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.01	0.01	0.01	—	23.4	< 0.005	< 0.005	0.04	23.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.7	< 0.005	< 0.005	0.03	29.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.87	< 0.005	< 0.005	0.01	3.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.75	< 0.005	< 0.005	0.01	4.94
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

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

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.41	1.76	< 0.005	0.06	—	0.06	0.05	—	0.05	—	324	324	0.01	< 0.005	—	325
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.03	0.26	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.6	53.6	< 0.005	< 0.005	—	53.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	0.01	0.01	0.02	170
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.02	221
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	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.4	23.4	< 0.005	< 0.005	0.04	23.7
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.7	28.7	< 0.005	< 0.005	0.03	29.9
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	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.87	3.87	< 0.005	< 0.005	0.01	3.92
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.75	4.75	< 0.005	< 0.005	0.01	4.94
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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

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

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

Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.77	8.91	0.02	0.26	—	0.26	0.24	—	0.24	—	1,647	1,647	0.07	0.01	—	1,652
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.24	1.63	< 0.005	0.05	—	0.05	0.04	—	0.04	—	273	273	0.01	< 0.005	—	274
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.00	0.00	0.17	0.17	0.17	0.04	0.04	0.04	—	186	186	0.01	0.01	0.63	189
Vendor	0.01	0.01	0.21	0.09	< 0.005	0.06	0.06	0.06	< 0.005	0.02	0.02	—	208	208	< 0.005	0.03	0.53	217
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



Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.77	8.91	0.02	0.26	—	0.26	0.24	—	0.24	—	1,647	1,647	0.07	0.01	—	1,652
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.24	1.63	< 0.005	0.05	—	0.05	0.04	—	0.04	—	273	273	0.01	< 0.005	—	274
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.00	0.00	0.17	0.17	0.17	0.04	0.04	0.04	—	186	186	0.01	0.01	0.63	189
Vendor	0.01	0.01	0.21	0.09	< 0.005	0.06	0.06	0.06	< 0.005	0.02	0.02	—	208	208	< 0.005	0.03	0.53	217
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	0.06	0.06	0.06	0.67	0.00	0.17	0.17	0.17	0.04	0.04	0.04	—	165	165	< 0.005	0.01	0.02	167
Vendor	0.01	0.01	0.22	0.09	< 0.005	0.06	0.06	0.06	< 0.005	0.02	0.02	—	208	208	< 0.005	0.03	0.01	217
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	0.52	0.00	0.00	0.12	0.12	0.12	0.03	0.03	—	117	117	< 0.005	< 0.005	0.19	118
Vendor	0.01	0.01	0.15	0.06	< 0.005	0.04	0.04	0.04	< 0.005	0.01	0.01	—	143	143	< 0.005	0.02	0.16	149
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	0.09	0.00	0.02	0.02	0.02	0.00	< 0.005	< 0.005	—	19.3	19.3	< 0.005	< 0.005	0.03	19.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	0.01	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.03	24.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.9. Paving (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00





Off-Road Equipment	0.15	0.13	1.17	1.63	< 0.005	0.05	—	0.05	—	0.05	—	248	248	0.01	< 0.005	—	249
Onsite truck	0.00	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.30	< 0.005	0.01	—	0.01	—	0.01	—	41.1	41.1	< 0.005	< 0.005	—	41.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.16	0.00	0.20	0.20	0.00	0.05	0.05	—	214	214	0.01	0.01	0.73	218
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.77	0.00	0.20	0.20	0.00	0.05	0.05	—	190	190	< 0.005	0.01	0.02	192
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.03	0.03	0.00	0.01	0.01	—	32.1	32.1	< 0.005	< 0.005	0.05	32.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.32	5.32	< 0.005	< 0.005	0.01	5.39





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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.34	2.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.4	21.4	< 0.005	< 0.005	—	21.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

















Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	569	569	0.04	< 0.005	—	571
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	498	498	0.03	< 0.005	—	500
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,067	1,067	0.07	0.01	—	1,071
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	569	569	0.04	< 0.005	—	571
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	498	498	0.03	< 0.005	—	500
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,067	1,067	0.07	0.01	—	1,071
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.2	94.2	0.01	< 0.005	—	94.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	82.4	82.4	0.01	< 0.005	—	82.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	177	177	0.01	< 0.005	—	177

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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













Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.2	49.9	60.0	1.05	0.03	—	93.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	5.25	5.25	< 0.005	< 0.005	—	5.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.2	55.1	65.3	1.05	0.03	—	99.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.69	8.25	9.94	0.17	< 0.005	—	15.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.87	0.87	< 0.005	< 0.005	—	0.87
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.69	9.12	10.8	0.17	< 0.005	—	16.4

### 4.5. Waste Emissions by Land Use

#### 4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	44.7	0.00	44.7	4.47	0.00	—	157	
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00	
Total	—	—	—	—	—	—	—	—	—	—	—	44.7	0.00	44.7	4.47	0.00	—	157	









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

#### 4.8. Stationary Emissions By Equipment Type

##### 4.8.1. Unmitigated

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

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

##### 4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

#### 4.9.2. Mitigated

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

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

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

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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







## 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	9/10/2025	10/21/2025	5.00	30.0	—
Grading	Grading	9/25/2025	12/17/2025	5.00	60.0	—
Building Construction	Building Construction	10/24/2025	12/17/2026	5.00	300	—
Paving	Paving	9/12/2026	12/4/2026	5.00	60.0	—
Architectural Coating	Architectural Coating	10/11/2026	1/4/2027	5.00	61.0	—

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

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

Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

### 5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

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

Site Preparation	—	—	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2		
Site Preparation	Vendor	—	10.2	HHDT,MHDT		
Site Preparation	Hauling	0.00	20.0	HHDT		
Site Preparation	Onsite truck	—	—	HHDT		
Grading	—	—	—	—		
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2		
Grading	Vendor	—	10.2	HHDT,MHDT		
Grading	Hauling	6.88	20.0	HHDT		
Grading	Onsite truck	—	—	HHDT		
Building Construction	—	—	—	—		
Building Construction	Worker	13.0	18.5	LDA,LDT1,LDT2		
Building Construction	Vendor	6.67	10.2	HHDT,MHDT		
Building Construction	Hauling	0.00	20.0	HHDT		
Building Construction	Onsite truck	—	—	HHDT		
Paving	—	—	—	—		
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2		
Paving	Vendor	—	10.2	HHDT,MHDT		
Paving	Hauling	0.00	20.0	HHDT		
Paving	Onsite truck	—	—	HHDT		
Architectural Coating	—	—	—	—		
Architectural Coating	Worker	2.60	18.5	LDA,LDT1,LDT2		
Architectural Coating	Vendor	—	10.2	HHDT,MHDT		
Architectural Coating	Hauling	0.00	20.0	HHDT		
Architectural Coating	Onsite truck	—	—	HHDT		

### 5.3.2. Mitigated

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

Site Preparation	—	—	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2		
Site Preparation	Vendor	—	10.2	HHDT,MHDT		
Site Preparation	Hauling	0.00	20.0	HHDT		
Site Preparation	Onsite truck	—	—	HHDT		
Grading	—	—	—	—		
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2		
Grading	Vendor	—	10.2	HHDT,MHDT		
Grading	Hauling	6.88	20.0	HHDT		
Grading	Onsite truck	—	—	HHDT		
Building Construction	—	—	—	—		
Building Construction	Worker	13.0	18.5	LDA,LDT1,LDT2		
Building Construction	Vendor	6.67	10.2	HHDT,MHDT		
Building Construction	Hauling	0.00	20.0	HHDT		
Building Construction	Onsite truck	—	—	HHDT		
Paving	—	—	—	—		
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2		
Paving	Vendor	—	10.2	HHDT,MHDT		
Paving	Hauling	0.00	20.0	HHDT		
Paving	Onsite truck	—	—	HHDT		
Architectural Coating	—	—	—	—		
Architectural Coating	Worker	2.60	18.5	LDA,LDT1,LDT2		
Architectural Coating	Vendor	—	10.2	HHDT,MHDT		
Architectural Coating	Hauling	0.00	20.0	HHDT		
Architectural Coating	Onsite truck	—	—	HHDT		

### 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	61,005	20,335	23,400

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	45.0	0.00	—
Grading	3,300	0.00	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	8.95

### 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%
Parking Lot	8.95	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	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005
2027	0.00	532	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	23,722	3,647	1,668	6,461,956	150,119	25,828	11,817	41,101,027
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Regional Shopping Center	23,722	3,647	1,668	6,461,956	150,119	25,828	11,817	41,101,027
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. 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	61,005	20,335	23,400

### 5.10.3. Landscape Equipment

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

### 5.10.4. Landscape Equipment - Mitigated

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

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Regional Shopping Center	395,651	532	0.0330	0.0040	239,770
Parking Lot	341,644	532	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	390,341	532	0.0330	0.0040	239,770
Parking Lot	341,644	532	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	5,857,285	850,242
Parking Lot	0.00	850,242

### 5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Regional Shopping Center	5,314,900	850,242
Parking Lot	0.00	850,242

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Regional Shopping Center	83.0	—
Parking Lot	0.00	—

### 5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Regional Shopping Center	83.0	—
Parking Lot	0.00	—

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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 Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

#### 5.15. Operational Off-Road Equipment

##### 5.15.1. Unmitigated

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

##### 5.15.2. Mitigated

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

#### 5.16. Stationary Sources

##### 5.16.1. Emergency Generators and Fire Pumps

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

##### 5.16.2. Process Boilers

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

### 5.17. User Defined

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

### 5.18. Vegetation

#### 5.18.1. Land Use Change

##### 5.18.1.1. Unmitigated

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

##### 5.18.1.2. Mitigated

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

#### 5.18.1. Biomass Cover Type

##### 5.18.1.1. Unmitigated

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

##### 5.18.1.2. Mitigated

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

#### 5.18.2. Sequestration

##### 5.18.2.1. Unmitigated

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

### 5.18.2.2. Mitigated

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

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	30.6	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.04	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi. Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about  $\frac{3}{4}$  an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi. Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters. Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

### 6.2. Initial Climate Risk Scores

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

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

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

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

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

### 6.3. Adjusted Climate Risk Scores

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

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

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

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

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	82.7
AQ-PM	6.66
AQ-DPM	4.93
Drinking Water	78.5
Lead Risk Housing	26.1
Pesticides	29.6
Toxic Releases	8.06
Traffic	8.85
Effect Indicators	—
CleanUp Sites	90.1
Groundwater	82.8
Haz Waste Facilities/Generators	95.0
Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	78.8
Cardio-vascular	75.6
Low Birth Weights	56.4
Socioeconomic Factor Indicators	—
Education	43.4
Housing	27.2
Linguistic	2.81
Poverty	45.5
Unemployment	49.9

## 7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	53.2144232
Employed	9.919158219
Median HI	58.10342615
Education	—
Bachelor's or higher	42.08905428
High school enrollment	5.042987296
Preschool enrollment	56.08879764
Transportation	—
Auto Access	78.96830489
Active commuting	1.039394328
Social	—
2-parent households	78.08289491
Voting	77.55678173
Neighborhood	—
Alcohol availability	81.26523803
Park access	14.731169
Retail density	1.206210702
Supermarket access	20.5825741
Tree canopy	8.725779546
Housing	—
Homeownership	69.22879507
Housing habitability	84.72988579
Low-inc homeowner severe housing cost burden	63.63403054
Low-inc renter severe housing cost burden	81.17541383

Uncrowded housing	60.05389452
Health Outcomes	—
Insured adults	72.56512255
Arthritis	0.0
Asthma ER Admissions	32.4
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	14.0
Cognitively Disabled	18.3
Physically Disabled	22.7
Heart Attack ER Admissions	4.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	68.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	25.4
Elderly	16.5
English Speaking	76.5
Foreign-born	5.1
Outdoor Workers	19.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	89.5
Traffic Density	9.3
Traffic Access	23.0
Other Indices	—
Hardship	58.2
Other Decision Support	—
2016 Voting	78.1

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	57.0
Healthy Places Index Score for Project Location (b)	41.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

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

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

This table summarizes the points earned for each health and equity measure category, and the total possible points for each category. If N/A is selected for any measure(s), the total possible points in that category are reduced accordingly. The points for each category are then weighted on a 15-point scale to determine the score per category and a total weighted score.

Category	Number of Applicable Measures	Total Points Earned by Applicable Measures	Max Possible Points	Weighted Score
Community-Centered Development	5.00	0.00	25.0	0.00
Inclusive Engagement	6.00	0.00	30.0	0.00
Accountability	5.00	0.00	25.0	0.00
Construction Equity	6.00	0.00	30.0	0.00
Public Health and Air Quality	3.00	0.00	15.0	0.00
Inclusive Economics & Prosperity	4.00	0.00	20.0	0.00
Inclusive Communities	7.00	0.00	35.0	0.00
<b>Total</b>	<b>36.0</b>	<b>0.00</b>	<b>180</b>	<b>0.00</b>

Based on the weighted score of 0 out of a total 180 possible points, your project qualifies for the Acorn equity award level. Organization(s) consulted by the user to complete the Health & Equity Scorecard: Elevated Entitlements, Steeno Design Studios



### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Vacant Lot not demolition required
Operations: Vehicle Data	Updated per traffic study, traffic study does not account that majority of vehicles will be electric utilizing the charging station. This will significantly reduce the CO output
Land Use	building area updated according to site plan