MEMORANDUM

URBAN | CROSSROADS

DATE: May 19, 2025
TO: Juan Villalobos, Ruth Villalobos & Associates, Inc.
FROM: Haseeb Qureshi
Ali Dadabhoy
JOB NO: 14238-06 AQ, GHG & EA Assessment

GLENDALE-LOS ANGELES GARDEN RIVER BRIDGE AIR QUALITY, GREENHOUSE GAS & ENERGY ASSESSMENT

Juan Villalobos,

Urban Crossroads, Inc. is pleased to provide the following Air Quality (AQ), Greenhouse Gas (GHG) & Energy Assessment (EA) for the Glendale-Los Angeles Garden River Bridge (**Project**), which is generally located north of N. Zoo Drive, in the City of Los Angeles, and south of the intersection of Flower Street and Fairmont Avenue in in the City of Glendale. The proposed residential Project site is located within a commercial area with the nearest existing single-family residential homes approximately 1,360 feet to the northeast. The John Ferraro Athletic Fields, Los Angeles Zoo, and other community resources within Los Angeles are located south of the Project site.

PROJECT OVERVIEW

The City of Glendale as lead agency in cooperation with the City of LA, as responsible agency, proposes the construction of a three-span, curvilinear, landscaped bridge for use by pedestrians and bicyclists, as shown in Exhibit 1. The intent of this multi-community resource is to increase access to Glendale Narrows Riverwalk, and Griffith Park; to improve connections; and to increase the safety of paths used for pedestrians and cyclists. Dedicated access across the Los Angeles River at this key location would improve public safety and accessibility to important community resources by creating a connection between the Cities of Glendale and Los Angeles across the Los Angeles River for pedestrians and cyclists.

The proposed bridge would be concrete with two supporting piers in the Los Angeles River. It would feature extensive landscaping on the approaches, as well as on the bridge itself, and is thus named the "Garden River Bridge." A number of raised planting beds on the bridge would create dedicated zones for bicycle and pedestrian circulation, shade structures, canopied seating areas, dispersed gathering spaces, and scenic views of the Los Angeles River.

The City of Los Angeles owns, operates, and maintains the south side of the Los Angeles River, located within the southern portion of the proposed Project area; also within this area, Southern California Edison (SCE) holds a fifteen-foot easement along Zoo Drive and overhead facilities on Los Angeles Department of Water and Power (LADWP) poles. On the north bank of the Los Angeles River, parcels within the northern portion of the proposed Project limits are owned by the City of Glendale, the City of Los Angeles, and the Los Angeles County Flood Control District (LACFCD). Furthermore, easements that cross the proposed Project area on the northern side are held by the City of Glendale for utility purposes (e.g., poles, sewers and related structures), and for the existing Riverwalk pedestrian/bike trail.

The proposed Project would include overall temporary impacts of approximately 2.94 acres and approximately 1.4 acres of permanent impacts. Temporary impacts would include water diversion activities, excavation activities, and areas of access and staging. Permanent impacts would include the bridge, Riverwalk bike path reconstruction adjacent to the bridge, a new connection from the bridge to Zoo Drive, and the realignment of Zoo Drive; see Exhibit 2. The realignment of Zoo Drive would be to permit the construction of stairs and a ramp leading up to the LA River Bike Path and the proposed bridge. Trees between Zoo Drive and the Los Angeles River Bike Path would be removed, and a new curb would be installed as part of proposed street improvements. Additionally, a sidewalk would be installed to facilitate access from the bridge to the John Ferraro Athletic Fields to the south via a new raised crosswalk across Zoo Drive.

Construction is anticipated to begin in the Fall of 2025 and would last approximately 2.5 years, ending in the Spring of 2028. The proposed Project would occur in six (6) phases, and shown and summarized below.

- Phase 0: Mobilization – The initial phase of the proposed Project would include requests for information, preparing and reviewing submittals, and procuring materials.
- Phase 1: North Abutment and Approaches – Approach work, bike path work, and abutment work.
- Phase 2: Bridge Substructure – Construct bents within the LA River.
- Phase 3: South Abutment and Approaches – Construct the south abutment and connections to Zoo Drive; realign Zoo Drive.
- Phae 4: Bridge Superstructure – Construct the bridge superstructure using falsework within the LA River.
- Phase 5: Architectural Elements/Landscaping – Construct the architectural elements (e.g., canopies, landscaping, etc.) on the bridge and approaches.

The bridge abutments would be constructed to be higher than the existing elevation of the channel walls and would not touch the levee walls. The abutments would be supported by deep foundations consisting of cast-in-drilled-hole concrete piles; the abutments would not be supported by the channel walls. In order to address drainage from the bridge deck, pipes would be hung inside of the bridge and tie into existing drainage pipes or water treatment features on both sides of the Los Angeles River channel. Activities associated with the realignment of Zoo Drive would include the removal of trees along the Los Angeles River Bike Path along Zoo Drive, within the southern portion of the proposed Project's footprint in the City of LA.

The demolition and excavation phases of the proposed Project are expected to generate the most construction traffic and require the most equipment. In-river construction would occur during

the dry season (April through October) when flood flows are very unlikely. The construction equipment used during different portions of the proposed Project would include work trucks, concrete trucks, cast-in-drilled-hole concrete pile drilling rigs, mobile cranes, and excavators. The construction contractor would be required to lay down timber mats to protect the Los Angeles River bottom and prevent potential impacts to the Los Angeles River bottom during construction. While variable, an average of 15 people would be on site daily for the duration of construction activities. Construction access to the proposed Project site would be provided from Zoo Drive on the City of Los Angeles side of the proposed Project and from Flower Street on the Glendale side of the Project, with intermittent temporary lane closures and or reduced access. Due to the lack of suitable access ramps within close proximity to the proposed Project site, the construction contractor may construct a temporary ramp from Zoo Drive down the sloped levee into the channel bottom. The temporary construction staging area would be located in the City of Los Angeles and the City of Glendale at the southern and northern areas of the proposed Project; specifically, one of the staging areas would be on the north side of Zoo Drive within the shoulder of the road. Additional staging would occur within the Los Angeles River's northern bank and southern bank during construction of the bridge's piers. Any rights of entry and/or temporary easements would be negotiated as part of the final design phase prior to the start of construction. The existing pedestrian and bike path use on the Riverwalk and the Los Angeles River Bike Path would require temporary intermittent detours during construction activities. The City of Glendale would be responsible for the construction of the proposed Project. The cities of Glendale and Los Angeles are currently negotiating an agreement to address shared ownership, operation, and maintenance of the proposed Project.

SUMMARY OF FINDINGS

Results of the assessment indicate that the Project would result in a less than significant impact with respect to air quality, greenhouse gas and energy and no mitigation is required.

EXHIBIT 1: PROJECT SITE

PROJECT AIR QUALITY IMPACTS

REGULATORY BACKGROUND

FEDERAL REGULATIONS

The EPA is responsible for setting and enforcing the national ambient air quality standards (NAAQS) for O_3, CO, NO_X, SO_2, PM_{10}, and lead (Pb) (1). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (2). The CAA also mandates that each state submit and implement state implementation plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (3) (4). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_X is a collective term that includes all forms of NO_X which are emitted as byproducts of the combustion process.

CALIFORNIA REGULATIONS

CARB

The CARB, which became part of the California EPA (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the California ambient air quality standards (CAAQS) for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4, visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl

are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (5) (6).

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g., motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROGs, NO_X, CO and PM_{10}. However, air basins may use an alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

AQMP

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMP to meet the state and federal ambient air quality standards (7). AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

APPLICABLE REGULATORY REQUIREMENTS

SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings) (8) (9).

SCAQMD Rule 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

- Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
- All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.

METHODOLOGY

In May 2022, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including the South Coast Air Quality Management District (SCAQMD), released the latest version of the CalEEMod Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (11). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality and greenhouse gas emissions.

Standards of Significance

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the California Environmental Quality Act Guidelines (*CEQA Guidelines*) (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (10):

- **Threshold 1**: Conflict with or obstruct implementation of the applicable air quality plan.
- **Threshold 2**: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.
- **Threshold 3**: Expose sensitive receptors to substantial pollutant concentrations.
- **Threshold 4**: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

CITY OF LOS ANGELES CALIFORNIA ENVIRONMENTAL QUALITY ACT THRESHOLDS GUIDE

The L.A. CEQA Thresholds Guide (2006) describes significance thresholds to be used in air quality analyses and outlines methodologies for determining significance. It refers to the SCAQMD CEQA Air Quality Analysis Handbook (1993) for appropriate thresholds. Although SCAQMD has not published an updated Handbook, various supplements have been published that provide updated methodologies for analyzing air quality impacts as well as thresholds of significance.

These current SCAQMD methodologies and significance thresholds were utilized in this analysis as presented below.

AIR QUALITY REGIONAL EMISSIONS THRESHOLDS

The SCAQMD has developed regional significance thresholds for criteria pollutants, as summarized at Table 1 (12). The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that any projects in the South Coast Air Basin (SCAB) with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Construction	Operations
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day

lbs/day – Pounds Per Day

AIR QUALITY LOCALIZED EMISSIONS THRESHOLDS

For this Project, the appropriate Source Receptor Area (SRA) for the Localized Significant Thresholds (LST) analysis is the SCAQMD East San Fernando Valley monitoring station (SRA 7). LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size. The SCAQMD's screening look-up tables are utilized in determining localized impacts. The proposed project is located on approximately 2.94 acres and it should be noted that since the look-up tables identify thresholds at only 1 acre, 2 acres, and 5 acres, linear regression has been utilized to determine localized significance thresholds. Consistent with SCAQMD guidance, the thresholds presented in Table 2 were calculated by interpolating the threshold values for the Project's disturbed acreage.

TABLE 2: MAXIMUM DAILY LOCALIZED EMISSIONS THRESHOLDS

Source	Emissions (lbs/day)			
	VOC	NO_X	PM_{10}	$PM_{2.5}$
Construction	132 lbs/day	989 lbs/day	122 lbs/day	57 lbs/day

[1]Source of localized significance threshold (LSTs) is provided on page 9.

REGIONAL CONSTRUCTION EMISSIONS SUMMARY

Construction activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction related emissions are expected from the following construction activities:

- Phase 1: North Abutment & Approaches
- Phase 2: Bridge Substructure (Bent Construction)
- Phase 3: South Abutment & Approaches
- Phase 4: Bridge Superstructure
- Phase 5: Architectural Elements / Landscaping

ON-ROAD TRIPS

Construction generates on-road vehicle emissions from vehicle usage for workers and vendors commuting to and from the site. It should be noted that the CalEEMod defaults for worker trips have been adjusted based on information provided by the Project applicant. Vendor trips are based on CalEEMod defaults.

CONSTRUCTION DURATION

Per Project applicant provided data, construction of Project is expected to commence in January 2026 and would last through March 2028. The construction schedule utilized in the analysis represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent[1]. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines (13).

CONSTRUCTION EQUIPMENT

The CalEEMod default construction equipment associated with the proposed Project has been adjusted based on information provided by the Project applicant. Consistent with industry standards and typical construction practices, each piece of equipment will operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the code.

REGIONAL CONSTRUCTION EMISSIONS SUMMARY

The estimated maximum daily construction emissions without mitigation are summarized on Table 3. Detailed construction model outputs are presented in Attachment A. Under the assumed

[1] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offroad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

scenarios, emissions resulting from the Project construction will not exceed thresholds established by the SCAQMD for emissions of any criteria pollutant and no mitigation is required.

TABLE 3: OVERALL REGIONAL CONSTRUCTION EMISSIONS SUMMARY

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2026	2.86	20.50	27.80	0.07	1.50	0.84
2027	2.72	16.50	21.60	0.07	1.40	0.75
Winter						
2026	1.39	9.55	13.50	0.03	0.78	0.37
2027	1.37	9.21	13.50	0.03	0.62	0.39
2028	1.21	8.33	10.00	0.03	0.59	0.36
Maximum Daily Emissions	**2.86**	**20.50**	**27.80**	**0.07**	**1.50**	**0.84**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

[1]PM_{10} and $PM_{2.5}$ source emissions reflect 3x daily watering per SCAQMD Rule 403 for fugitive dust.

REGIONAL OPERATIONAL EMISSIONS

Operational activities associated with Projects would result in emissions of CO, VOCs, NO_X, SO_X, PM_{10}, and $PM_{2.5}$. As this Project involves the construction of 350-foot long, three-span curvilinear bridge structure and associated improvements, heating and consumer products would not be used. Additionally, any other sources including mobile and energy sources would not contribute a substantial amount of emissions capable of exceeding SCAQMD thresholds.

Sensitive Receptor Locations

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors". These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project site has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

Receptors in the Project study area are described below. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site. Receptors in the Project study area are shown on Exhibit 2 under the Localized Construction Emissions section later in the report.

- Receptor R1 represents the John Ferraro Athletic Fields south along Zoo Drive, approximately 318 feet west of the Project site at the play structure nearest to the Project site.
- Receptor R2 represents the existing residence located at 810 Pelanconi Avenue, approximately 1,238 feet northeast of the Project site.
- Receptor R3 represents an outdoor seating area of an office structure located at 1000 Flower Street, approximately 422 feet northwest of the Project site.
- Receptor R4 represents the John Ferraro Athletic Field soccer field, approximately 13 feet south of the Project site.
- Receptor R5 represents the John Ferraro Athletic Field soccer field, approximately 101 feet southwest of the Project site.
- Receptor R6 represents the Los Angeles Zoo south along Zoo Drive, approximately 1,454 feet south of the Project site.
- Receptor R7 represents the Los Angeles Children Zoo south along Zoo Drive, approximately 2,215 feet southwest of the Project site.

SENSITIVE RECEPTORS

The analysis uses the methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology) (14). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4[2]. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. It should be noted that SCAQMD also states that projects that are statutorily or categorically exempt under CEQA would not be subject to LST analyses. Projects exempt from CEQA also include infill projects that meet the H&S Code provisions. The proposed Project is anticipated to be Categorically Exempt under CEQA and as such while LST analysis is not required for this Project, LST analysis is presented to further underscore that there are in fact no significant impacts associated with the Project.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual or cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine

2 The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

localized construction impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). The nearest receptor used for evaluation of localized impacts of PM_{10} and $PM_{2.5}$ is location R2 represented by the existing residence at 810 Pelanconi Ave, approximately 1,238 feet (377 meters) northeast of the Project site. As such, for evaluation of localized PM_{10} and $PM_{2.5}$, a 377-meter distance will be used. Receptors in the Project study area shown on Exhibit 2.

As previously stated, and consistent with LST Methodology, the nearest industrial/commercial use to the Project site is used to determine construction air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assume that an individual could be present at these sites for periods of one to 8 hours. The nearest receptor used for evaluation of localized impacts of NO_X and CO is location R4 represented by the John Ferraro Athletic Fields, approximately 13 feet (4 meters) south of the Project site.

It should be noted that the *LST Methodology* explicitly states that "*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters* (14)." As such, for evaluation of localized NO_x and CO, a 25-meter distance will be used.

Additionally, receptors at locations R6 and R7, which represent potential impacts to patrons of the Los Angeles Zoo have been considered in this analysis. Given that both locations R6 and R7 are located further away from the Project's construction activities than locations R1, R2, R3, R4, and R5 any potential impacts at locations R6 or R7 would be less than what is already disclosed in this report for impacts that may occur at locations R1, R2, R3, R4, and R5.

EXHIBIT 2: SENSITIVE RECEPTOR LOCATIONS

LOCALIZED CONSTRUCTION EMISSIONS

Table 4 identifies the localized impacts at the nearest receptor location in the vicinity of the Project. Outputs from the model runs for construction LSTs are provided in Attachment A. For analytical purposes, emissions associated with peak site preparation and grading activities are considered for purposes of LSTs since these phases represents the maximum localized emissions that would occur. Any other construction phases of development that overlap would result in lesser emissions and consequently lesser impacts than what is disclosed herein. As shown in Table 4, emissions resulting from the construction will not exceed the numerical thresholds of significance established by the SCAQMD for any criteria pollutant. Thus, a less than significant impact would occur for localized Project-related construction-source emissions and no mitigation is required.

TABLE 4: PROJECT LOCALIZED CONSTRUCTION IMPACTS

On-Site Emissions	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Phase 1: North Abutment & Approaches				
Maximum Daily Emissions	7.94	10.40	0.26	0.24
SCAQMD Localized Threshold	132	989	122	57
Threshold Exceeded?	NO	NO	NO	NO
Phase 2: Bridge Substructure (Bent Construction)				
Maximum Daily Emissions	20.20	23.90	0.71	0.65
SCAQMD Localized Threshold	132	989	122	57
Threshold Exceeded?	NO	NO	NO	NO
Phase 3: South Abutment & Approaches				
Maximum Daily Emissions	9.46	12.40	0.33	0.31
SCAQMD Localized Threshold	132	989	122	57
Threshold Exceeded?	NO	NO	NO	NO

PROJECT GREENHOUSE GAS ANALYSIS

As this Project involves the construction of 350-foot long, three-span curvilinear bridge structure and associated improvements, heating and consumer products would not be used. Additionally, any other sources including mobile and energy sources would not result in any substantive new long-term GHG emissions sources. The estimated GHG emissions for the Project land use are summarized on Table 5. The estimated GHG emission include emissions from Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), and Refrigerants (R). As shown on Table 5, the proposed Project would generate a total of approximately 46.97 $MTCO_2e$/yr.

TABLE 5: TOTAL PROJECT GHG EMISSIONS

Year	Emission (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	46.77	2.00E-03	6.67E-04	6.33E-03	46.97
Total CO_2e (All Sources)	**46.97**				

A numerical threshold for determining the significance of GHG emissions in the SCAB has not been established by the SCAQMD for projects where it is not the lead agency. As an interim threshold based on guidance provided in the CAPCOA *CEQA and Climate Change* handbook, the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90% of emissions from future development. The latest threshold developed by SCAQMD using this method is 3,000 $MTCO_2e$/yr for all projects (15).

The Project would result in approximately 46.97 $MTCO_2e$/yr; the proposed Project would not exceed the SCAQMD's numeric threshold of 3,000 $MTCO_2e$/yr. Thus, the Project would result in a less than significant impact with respect to GHG emissions.

PROJECT ENERGY ANALYSIS

Vehicle fuel efficiencies for light-duty-auto vehicles (LDA), light-duty-trucks (LDT1), and light-duty-trucks (LDT2) were estimated using information generated within the 2021 version of the EMFAC developed by the California Air Resources Board (CARB). EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to project changes in future emissions from on-road mobile sources (9). EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the California Los Angeles South-Coast sub-area for the 2026 calendar year. It should be noted that using the static year 2026 is considered conservative for estimating fuel consumption as it does not account for fuel efficiency improvements each year. Data from EMFAC2021 is shown in Attachment B.

CONSTRUCTION ENERGY DEMANDS

CONSTRUCTION EQUIPMENT ELECTRICITY USAGE ESTIMATES

The *2024 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of $2.66, which was used to calculate the Project's total construction power cost (16).

Based on Table 6, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately $8,857.09. As shown on Table 7, the total electricity usage from on-site Project construction related activities is estimated to be approximately 63,265 kWh.

TABLE 6: PROJECT CONSTRUCTION POWER COST

Land Use	**Power Cost** (per 1,000 SF of building per month of construction)	**Total Building Size** (1,000 SF)	**Construction Duration** (months)	**Project Construction Power Cost**
Bridge/Overpass Construction	$2.66	128.067	26	$8,857.09
			TOTAL PROJECT CONSTRUCTION POWER COST	***$8,857.09***

TABLE 7: PROJECT CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh[1]	Project Construction Electricity Usage (kWh)
Bridge/Overpass Construction	$0.16	63,265
TOTAL PROJECT CONSTRUCTION ELECTRICITY USAGE (kWh)		***63,265***

[1]Assumes the Project will be under the GS-1 General Service Rate under Southern California Edison

CONSTRUCTION EQUIPMENT FUEL ESTIMATES

As presented in Table 8, Project construction activities would consume an estimated 130,082 gallons of diesel fuel. Project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT, the construction worker trips would generate an estimated 404,040 VMT. Based on CalEEMod methodology, it is assumed that 50% of all vendor trips are from LDA, 25% are from LDT1, and 25% are from LDT2. Data regarding Project related construction worker trips were based on CalEEMod defaults for the land use type and project location which are also utilized within the air quality assessment and CalEEMod outputs contained herein.

.

TABLE 8: PROJECT CONSTRUCTION EQUIPMENT FUEL CONSUMPTIONS ESTIMATES

Activity/Duration	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Phase 1	97	Bore/Drill Rigs	83	1	8	0.5	332	1,741
		Excavators	36	2	8	0.38	219	1,148
		Off-Highway Trucks	376	2	8	0.38	2,286	11,986
Phase 2	85	Bore/Drill Rigs	83	2	8	0.5	664	3,051
		Excavators	36	4	8	0.38	438	2,011
		Cranes	367	2	8	0.29	1,703	7,824
		Off-Highway Trucks	376	3	8	0.38	3,429	15,755
Phase 3	155	Bore/Drill Rigs	83	1	8	0.5	332	2,782
		Excavators	36	2	8	0.38	219	1,834
		Off-Highway Trucks	376	2	8	0.38	2,286	19,154
		Pavers	81	1	8	0.42	272	2,280
Phase 4	119	Cranes	367	2	8	0.29	1,703	10,954
		Off-Highway Trucks	376	4	8	0.38	4,572	29,410
Phase 5	131	Cranes	367	2	8	0.29	1,703	12,058
		Off-Highway Trucks	376	1	8	0.38	1,143	8,094
						CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)		***130,082***

As shown on Table 9, it is estimated that 14,313 gallons of fuel will be consumed related to construction worker trips during full construction of the proposed Project. Project construction worker trips would represent a "single-event" gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

TABLE 9: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy	Estimated Fuel Consumption
				LDA			
	Phase 1	97	20	18.5	35,890	33.12	1,084
	Phase 2	85	30	18.5	47,175	33.12	1,425
	Phase 3	79	10	18.5	14,615	33.12	441
				LDT1			
2026	Phase 1	97	10	18.5	17,945	24.62	729
	Phase 2	85	15	18.5	23,588	24.62	958
	Phase 3	79	5	18.5	7,308	24.62	297
				LDT2			
	Phase 1	97	10	18.5	17,945	24.57	730
	Phase 2	85	15	18.5	23,588	24.57	960
	Phase 3	79	5	18.5	7,308	24.57	297
				LDA			
	Phase 3	76	10	18.5	14,060	33.12	425
	Phase 4	119	30	18.5	66,045	33.12	1,994
	Phase 5	66	10	18.5	12,210	33.12	369
				LDT1			
2026	Phase 3	76	5	18.5	7,030	24.62	286
	Phase 4	119	15	18.5	33,023	24.62	1,341
	Phase 5	66	5	18.5	6,105	24.62	248
				LDT2			
	Phase 3	76	5	18.5	7,030	24.57	286
	Phase 4	119	15	18.5	33,023	24.57	1,344
	Phase 5	66	5	18.5	6,105	24.57	248
				LDA			
2026	Phase 5	65	10	18.5	12,025	33.12	363
				LDT1			

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy	Estimated Fuel Consumption
	Phase 5	65	5	18.5	6,013	24.62	244
				LDT2			
	Phase 5	65	5	18.5	6,013	24.57	245
						TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION	***14,313***

CONSTRUCTION VENDOR/HAULING FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips would generate an estimated 1,734 VMT. It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHDT) and 50% of vendor trips are from heavy-heavy duty trucks (HHDT). As shown on Table 10, it is estimated that 244 gallons of fuel will be consumed related to construction vendor trips (medium duty trucks) during full construction of the Project. Project construction vendor trips would represent a "single- event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 10: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (TRUCKS)

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy	Estimated Fuel Consumption
				MHDT			
2026	Phase 2	85	1	10.2	867	8.49	102
				HHDT (Vendor)			
	Phase 2	85	1	10.2	867	6.12	142
						TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION	***244***

CONSTRUCTION ENERGY DEMANDS SUMMARY

Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Best Available Control Measures (BACMs) inform construction equipment operators of this requirement.

With regard to construction worker trips, the 2023 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements. As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

OPERATIONAL ENERGY DEMANDS SUMMARY

The Project does not propose a trip-generating land use. For these reasons, operational-related energy consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

AIR QUALITY, GREENHOUSE GAS & ENERGY CONCLUSION

Results of the assessment indicate that the Project is not anticipated to result in a significant impact during construction and operations activities with air quality, greenhouse gas and energy and no mitigation is required.

REFERENCES

1. **United States Environmental Protection Agency.** National Ambient Air Quality Standards (NAAQS). [Online] 1990. https://www.epa.gov/environmental-topics/air-topics.

2. **Environmental Protection Agency.** Air Pollution and the Clean Air Act. [Online] http://www.epa.gov/air/caa/.

3. **1990 Clean Air Act Amendment Summary: Title I. [Online] https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-i.**

4. **United States Environmental Protection Agency. 1990 Clean Air Act Amendment Summary: Title II. [Online] https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-ii.**

5. **Air Resources Board. California Ambient Air Quality Standards (CAAQS). [Online] 2009. [Cited: April 16, 2018.] http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm.**

6. **Environmental Protection Agency. National Ambient Air Quality Standards (NAAQS). [Online] 1990. https://www.epa.gov/environmental-topics/air-topics.**

7. **Southern California Association of Governments. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. [Online] April 2016. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.**

8. **South Coast Air Quality Management District. RULE 403. FUGITIVE DUST. [Online] https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf?sfvrsn=4.**

9. **—. RULE 1113. Architectural Coatings. [Online] http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf.**

10. **California Air Pollution Control Officers Association (CAPCOA). California Emissions Estimator Model (CalEEMod). [Online] May 2022. www.caleemod.com.**

11. **State of California. *2020 CEQA California Environmental Quality Act.* 2020.**

12. **South Coast Air Quality Management District (SCAQMD). SCAQMD Air Quality Significance Thresholds. [Online] https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf.**

13. **State of California. *2020 CEQA California Environmental Quality Act.* 2020.**

14. **South Coast Air Quality Management District. *Localized Significance Thresholds Methodology.* s.l. : South Coast Air Quality Managment District, 2003.**

15. **—. Interim CEQA GHG Threshold for Stationary Sources, Rules and Plans. [Online] December 5, 2008. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf.**

16. **Pray, Richard. *2024 National Construction Estimator.* Carlsbad : Craftsman Book Company, 2024.**

17. California Department of Transportation. EMFAC Software. [Online] http://www.dot.ca.gov/hq/env/air/pages/emfac.htm.

ATTACHMENT A
CALEEMOD CONSTRUCTION EMISSIONS MODEL OUTPUTS

14238-Garden River Bridge Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14238-Garden River Bridge
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	20.2
Location	34.155999, -118.28119
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3974
EDFZ	17
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas

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
Bridge/Overpass Construction	0.06	Mile	2.94	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.39	2.86	20.5	27.8	0.07	0.71	0.79	1.50	0.65	0.19	0.84	—	8,160	8,160	0.33	0.09	2.83	8,199
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.64	1.39	9.55	13.5	0.03	0.36	0.52	0.78	0.33	0.12	0.39	—	3,907	3,907	0.16	0.05	0.05	3,923
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.66	1.40	8.98	12.6	0.03	0.33	0.37	0.68	0.30	0.09	0.39	—	4,087	4,087	0.16	0.04	0.58	4,104
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.25	1.64	2.31	0.01	0.06	0.07	0.12	0.06	0.02	0.07	—	677	677	0.03	0.01	0.10	679

2.2. Construction Emissions by Year, Unmitigated

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

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

2026	3.39	2.86	20.5	27.8	0.07	0.71	0.79	1.50	0.65	0.19	0.84	—	8,160	8,160	0.33	0.09	2.83	8,199
2027	3.23	2.72	16.5	21.6	0.07	0.61	0.78	1.40	0.56	0.18	0.75	—	8,110	8,110	0.33	0.09	2.48	8,147
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.64	1.39	9.55	13.5	0.03	0.33	0.52	0.78	0.31	0.12	0.37	—	3,907	3,907	0.16	0.05	0.05	3,923
2027	1.63	1.37	9.21	13.5	0.03	0.36	0.26	0.62	0.33	0.06	0.39	—	3,901	3,901	0.15	0.04	0.02	3,916
2028	1.44	1.21	8.33	10.0	0.03	0.33	0.26	0.59	0.30	0.06	0.36	—	3,563	3,563	0.14	0.04	0.02	3,577
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.55	1.31	8.98	12.6	0.03	0.30	0.37	0.68	0.28	0.09	0.37	—	3,752	3,752	0.15	0.04	0.58	3,769
2027	1.66	1.40	8.94	11.5	0.03	0.33	0.35	0.68	0.30	0.08	0.39	—	4,087	4,087	0.16	0.04	0.49	4,104
2028	0.26	0.22	1.48	1.79	0.01	0.06	0.05	0.10	0.05	0.01	0.06	—	635	635	0.02	0.01	0.06	638
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.28	0.24	1.64	2.31	0.01	0.06	0.07	0.12	0.05	0.02	0.07	—	621	621	0.03	0.01	0.10	624
2027	0.30	0.25	1.63	2.11	0.01	0.06	0.06	0.12	0.06	0.02	0.07	—	677	677	0.03	0.01	0.08	679
2028	0.05	0.04	0.27	0.33	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	105	105	< 0.005	< 0.005	0.01	106

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (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	1.39	1.17	7.94	10.4	0.03	0.26	—	0.26	0.24	—	0.24	—	3,335	3,335	0.14	0.03	—	3,346

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39	1.17	7.94	10.4	0.03	0.26	—	0.26	0.24	—	0.24	—	3,335	3,335	0.14	0.03	—	3,346
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.11	2.75	0.01	0.07	—	0.07	0.06	—	0.06	—	886	886	0.04	0.01	—	889
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.39	0.50	< 0.005	0.01	—	0.01	0.01	—	0.01	—	147	147	0.01	< 0.005	—	147
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.16	2.58	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	542	542	0.02	0.02	1.83	550
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	0.17	0.15	0.17	2.20	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	514	514	0.02	0.02	0.05	520
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	0.04	0.04	0.05	0.61	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	139	139	0.01	0.01	0.21	140
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	0.01	0.01	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	22.9	22.9	< 0.005	< 0.005	0.03	23.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Linear, Grading & Excavation (2026) - Unmitigated

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

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

Off-Road Equipment	3.14	2.64	20.2	23.9	0.07	0.71	—	0.71	0.65	—	0.65	—	7,316	7,316	0.30	0.06	—	7,341
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	4.71	5.56	0.02	0.16	—	0.16	0.15	—	0.15	—	1,704	1,704	0.07	0.01	—	1,710
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.86	1.02	< 0.005	0.03	—	0.03	0.03	—	0.03	—	282	282	0.01	< 0.005	—	283
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.23	3.88	0.00	0.00	0.05	0.05	0.00	0.00	0.00	—	813	813	0.03	0.03	2.75	825

Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.2	31.2	< 0.005	< 0.005	0.08	32.6
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	0.06	0.05	0.07	0.81	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	182	182	0.01	0.01	0.28	185
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.26	7.26	< 0.005	< 0.005	0.01	7.59
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	0.15	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	30.2	30.2	< 0.005	< 0.005	0.05	30.6
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.20	1.20	< 0.005	< 0.005	< 0.005	1.26
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. Linear, Drainage, Utilities, & Sub-Grade (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	1.56	1.31	9.46	12.4	0.03	0.33	—	0.33	0.31	—	0.31	—	3,650	3,650	0.15	0.03	—	3,663
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	9.46	12.4	0.03	0.33	—	0.33	0.31	—	0.31	—	3,650	3,650	0.15	0.03	—	3,663
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.02	2.65	0.01	0.07	—	0.07	0.07	—	0.07	—	779	779	0.03	0.01	—	781
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.37	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	129	129	0.01	< 0.005	—	129
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.29	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	271	271	0.01	0.01	0.92	275

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	0.08	0.07	0.09	1.10	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	257	257	0.01	0.01	0.02	260
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	55.6	55.6	< 0.005	< 0.005	0.08	56.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	9.21	9.21	< 0.005	< 0.005	0.01	9.33
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. Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	9.12	12.4	0.03	0.31	—	0.31	0.29	—	0.29	—	3,649	3,649	0.15	0.03	—	3,661

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	9.12	12.4	0.03	0.31	—	0.31	0.29	—	0.29	—	3,649	3,649	0.15	0.03	—	3,661
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	1.89	2.58	0.01	0.06	—	0.06	0.06	—	0.06	—	757	757	0.03	0.01	—	759
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.35	0.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	125	125	0.01	< 0.005	—	126
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.20	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	266	266	0.01	0.01	0.83	270
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	0.08	0.07	0.09	1.02	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	252	252	< 0.005	0.01	0.02	255
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	53.0	53.0	< 0.005	< 0.005	0.07	53.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	8.78	8.78	< 0.005	< 0.005	0.01	8.89
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

3.9. Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated

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

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

Off-Road Equipment	2.99	2.51	16.3	18.0	0.07	0.61	—	0.61	0.56	—	0.56	—	7,313	7,313	0.30	0.06	—	7,338
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.82	5.31	5.87	0.02	0.20	—	0.20	0.18	—	0.18	—	2,384	2,384	0.10	0.02	—	2,392
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	0.97	1.07	< 0.005	0.04	—	0.04	0.03	—	0.03	—	395	395	0.02	< 0.005	—	396
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.21	3.60	0.00	0.00	0.05	0.05	0.00	0.00	0.00	—	797	797	0.03	0.03	2.48	809

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	0.08	0.07	0.08	1.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	250	250	< 0.005	0.01	0.35	253
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	0.01	0.01	0.02	0.19	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	41.4	41.4	< 0.005	< 0.005	0.06	41.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Linear, Drainage, Utilities, & Sub-Grade (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.40	1.18	8.99	9.08	0.03	0.36	—	0.36	0.33	—	0.33	—	3,313	3,313	0.13	0.03	—	3,325
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.62	1.64	0.01	0.06	—	0.06	0.06	—	0.06	—	597	597	0.02	< 0.005	—	599
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	98.8	98.8	< 0.005	< 0.005	—	99.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.02	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	252	252	< 0.005	0.01	0.02	255
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	0.01	0.01	0.02	0.19	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	46.0	46.0	< 0.005	< 0.005	0.06	46.6

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.62	7.62	< 0.005	< 0.005	0.01	7.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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

3.13. Linear, Drainage, Utilities, & Sub-Grade (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.36	1.14	8.25	9.06	0.03	0.33	—	0.33	0.30	—	0.30	—	3,315	3,315	0.13	0.03	—	3,326
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.47	1.61	0.01	0.06	—	0.06	0.05	—	0.05	—	590	590	0.02	< 0.005	—	592

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.27	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	97.7	97.7	< 0.005	< 0.005	—	98.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.96	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	247	247	< 0.005	0.01	0.02	250
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	0.01	0.18	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	44.7	44.7	< 0.005	< 0.005	0.06	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	0.00	0.00	0.00	0.00	0.00	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	< 0.005	< 0.005	0.00	0.00	0.00	—	7.40	7.40	< 0.005	< 0.005	0.01	7.50
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)

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Phase 1: North Abutment & Approaches	Linear, Grubbing & Land Clearing	1/1/2026	5/15/2026	5.00	97.0	—
Phase 2: Bridge Substructure (Bent Construction)	Linear, Grading & Excavation	5/18/2026	9/11/2026	5.00	85.0	—
Phase 3: South Abutment & Approaches	Linear, Drainage, Utilities, & Sub-Grade	9/14/2026	4/16/2027	5.00	155	—
Phase 4: Bridge Superstructure	Linear, Drainage, Utilities, & Sub-Grade	4/17/2027	9/30/2027	5.00	119	—
Phase 5: Architectural Elements / Landscaping	Linear, Drainage, Utilities, & Sub-Grade	10/1/2027	3/31/2028	5.00	131	—

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
Phase 1: North Abutment & Approaches	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Phase 1: North Abutment & Approaches	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Phase 1: North Abutment & Approaches	Off-Highway Trucks	Diesel	Average	2.00	8.00	376	0.38
Phase 2: Bridge Substructure (Bent Construction)	Bore/Drill Rigs	Diesel	Average	2.00	8.00	83.0	0.50
Phase 2: Bridge Substructure (Bent Construction)	Excavators	Diesel	Average	4.00	8.00	36.0	0.38
Phase 2: Bridge Substructure (Bent Construction)	Cranes	Diesel	Average	2.00	8.00	367	0.29
Phase 2: Bridge Substructure (Bent Construction)	Off-Highway Trucks	Diesel	Average	3.00	8.00	376	0.38
Phase 3: South Abutment & Approaches	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Phase 3: South Abutment & Approaches	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Phase 3: South Abutment & Approaches	Off-Highway Trucks	Diesel	Average	2.00	8.00	376	0.38

Phase 3: South Abutment & Approaches	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Phase 4: Bridge Superstructure	Cranes	Diesel	Average	2.00	8.00	367	0.29
Phase 4: Bridge Superstructure	Off-Highway Trucks	Diesel	Average	4.00	8.00	376	0.38
Phase 5: Architectural Elements / Landscaping	Cranes	Diesel	Average	2.00	8.00	367	0.29
Phase 5: Architectural Elements / Landscaping	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Phase 1: North Abutment & Approaches	—	—	—	—
Phase 1: North Abutment & Approaches	Worker	40.0	18.5	LDA,LDT1,LDT2
Phase 1: North Abutment & Approaches	Vendor	—	10.2	HHDT,MHDT
Phase 1: North Abutment & Approaches	Hauling	0.00	20.0	HHDT
Phase 1: North Abutment & Approaches	Onsite truck	—	—	HHDT
Phase 2: Bridge Substructure (Bent Construction)	—	—	—	—
Phase 2: Bridge Substructure (Bent Construction)	Worker	60.0	18.5	LDA,LDT1,LDT2
Phase 2: Bridge Substructure (Bent Construction)	Vendor	1.00	10.2	HHDT,MHDT

Phase 2: Bridge Substructure (Bent Construction)	Hauling	0.00	20.0	HHDT
Phase 2: Bridge Substructure (Bent Construction)	Onsite truck	—	—	HHDT
Phase 3: South Abutment & Approaches	—	—	—	—
Phase 3: South Abutment & Approaches	Worker	20.0	18.5	LDA,LDT1,LDT2
Phase 3: South Abutment & Approaches	Vendor	—	10.2	HHDT,MHDT
Phase 3: South Abutment & Approaches	Hauling	0.00	20.0	HHDT
Phase 3: South Abutment & Approaches	Onsite truck	—	—	HHDT
Phase 4: Bridge Superstructure	—	—	—	—
Phase 4: Bridge Superstructure	Worker	60.0	18.5	LDA,LDT1,LDT2
Phase 4: Bridge Superstructure	Vendor	—	10.2	HHDT,MHDT
Phase 4: Bridge Superstructure	Hauling	0.00	20.0	HHDT
Phase 4: Bridge Superstructure	Onsite truck	—	—	HHDT
Phase 5: Architectural Elements / Landscaping	—	—	—	—
Phase 5: Architectural Elements / Landscaping	Worker	20.0	18.5	LDA,LDT1,LDT2
Phase 5: Architectural Elements / Landscaping	Vendor	—	10.2	HHDT,MHDT
Phase 5: Architectural Elements / Landscaping	Hauling	0.00	20.0	HHDT
Phase 5: Architectural Elements / Landscaping	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)

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)
Phase 1: North Abutment & Approaches	—	—	2.94	0.00	—
Phase 2: Bridge Substructure (Bent Construction)	—	—	2.94	0.00	—
Phase 3: South Abutment & Approaches	—	—	2.94	0.00	—
Phase 4: Bridge Superstructure	—	—	2.94	0.00	—
Phase 5: Architectural Elements / Landscaping	—	—	2.94	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Bridge/Overpass Construction	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	690	0.05	0.01
2027	0.00	690	0.05	0.01
2028	0.00	690	0.05	0.01

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.7	annual days of extreme heat
Extreme Precipitation	6.75	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	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	69.6
AQ-PM	65.9
AQ-DPM	47.5
Drinking Water	92.5

Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	70.0
Traffic	99.5
Effect Indicators	—
CleanUp Sites	94.3
Groundwater	36.9
Haz Waste Facilities/Generators	47.6
Impaired Water Bodies	77.3
Solid Waste	89.9
Sensitive Population	—
Asthma	8.92
Cardio-vascular	23.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

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	—
Employed	—

Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	87.3

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	0.0
Cognitively Disabled	99.8
Physically Disabled	99.8
Heart Attack ER Admissions	79.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
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	100.0
SLR Inundation Area	0.0
Children	99.4
Elderly	99.8
English Speaking	0.0
Foreign-born	0.0

Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	97.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
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)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Taken from site plan
Construction: Off-Road Equipment	Construction equipment provided by Project applicant Standard 8-hour working day Off-Highway Trucks represent "Concrete Trucks"
Construction: Dust From Material Movement	Emissions accounted only for grading
Construction: Trips and VMT	Client provided vendor trips per phase.

ATTACHMENT B

CALEEMOD OPERATIONAL EMISSIONS MODEL OUTPUTS

14238 - Garden River Bridge (Operations) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14238 - Garden River Bridge (Operations)
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	20.2
Location	34.155999, -118.28119
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3974
EDFZ	17
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.23

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
User Defined Recreational	1.00	User Defined Unit	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.10	0.09	1.19	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	0.00	327	327	0.01	0.01	0.91	331
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.10	0.10	1.07	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	0.00	313	313	0.01	0.01	0.02	317
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.10	0.11	1.10	< 0.005	< 0.005	0.30	0.31	< 0.005	0.08	0.08	0.00	317	317	0.01	0.01	0.40	321
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.02	0.02	0.20	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	0.00	52.5	52.5	< 0.005	< 0.005	0.07	53.2

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	0.12	0.10	0.09	1.19	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	—	327	327	0.01	0.01	0.91	331
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.10	0.09	1.19	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	0.00	327	327	0.01	0.01	0.91	331
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.10	1.07	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	—	313	313	0.01	0.01	0.02	317
Area	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.11	0.10	0.10	1.07	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	0.00	313	313	0.01	0.01	0.02	317
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.11	1.10	< 0.005	< 0.005	0.30	0.31	< 0.005	0.08	0.08	—	317	317	0.01	0.01	0.40	321
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.11	0.10	0.11	1.10	< 0.005	< 0.005	0.30	0.31	< 0.005	0.08	0.08	0.00	317	317	0.01	0.01	0.40	321
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02	0.02	0.02	0.20	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	52.5	52.5	< 0.005	< 0.005	0.07	53.2
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	0.02	0.02	0.02	0.20	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	0.00	52.5	52.5	< 0.005	< 0.005	0.07	53.2

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	0.12	0.10	0.09	1.19	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	—	327	327	0.01	0.01	0.91	331
Total	0.12	0.10	0.09	1.19	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	—	327	327	0.01	0.01	0.91	331
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	0.11	0.10	0.10	1.07	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	—	313	313	0.01	0.01	0.02	317
Total	0.11	0.10	0.10	1.07	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	—	313	313	0.01	0.01	0.02	317
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	0.02	0.02	0.02	0.20	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	52.5	52.5	< 0.005	< 0.005	0.07	53.2
Total	0.02	0.02	0.02	0.20	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	52.5	52.5	< 0.005	< 0.005	0.07	53.2

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipme	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	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

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	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

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	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)

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

5. Activity Data

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
User Defined Recreational	29.0	29.0	29.0	10,585	435	435	435	158,775

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

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)
User Defined Recreational	0.00	690	0.0489	0.0069	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Recreational	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Recreational	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

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.7	annual days of extreme heat
Extreme Precipitation	6.75	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—

AQ-Ozone	69.6
AQ-PM	65.9
AQ-DPM	47.5
Drinking Water	92.5
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	70.0
Traffic	99.5
Effect Indicators	—
CleanUp Sites	94.3
Groundwater	36.9
Haz Waste Facilities/Generators	47.6
Impaired Water Bodies	77.3
Solid Waste	89.9
Sensitive Population	—
Asthma	8.92
Cardio-vascular	23.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

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	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—

Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	87.3
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	0.0
Cognitively Disabled	99.8
Physically Disabled	99.8
Heart Attack ER Admissions	79.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
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	100.0
SLR Inundation Area	0.0

Children	99.4
Elderly	99.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	97.9
Traffic Density	0.0
Traffic Access	23.0
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
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)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Per client data, the Project will include 29 daily trips and a 15 mile trip length.

ATTACHMENT C

EMFAC2021

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	endar Y	hicle Categc	Model Year	Speed	Fuel	Population	Total VMT	el_Consumption (1000 g	Fuel_Consumption (gal)	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (SC)	2026	HHDT	Aggregate	Aggregate	Gasoline	31.71483174	2530.344681	0.595008255	595.008255	1164069.716	2530.344681	7277084.666	6.25	HHDT
Los Angeles (SC)	2026	HHDT	Aggregate	Aggregate	Diesel	55277.3799	6819808.694	1098.590287	1098590.287		6819808.694			
Los Angeles (SC)	2026	HHDT	Aggregate	Aggregate	Electricity	610.8824182	66680.90118	0	0		66680.90118			
Los Angeles (SC)	2026	HHDT	Aggregate	Aggregate	Natural Gas	6222.084708	388064.7258	64.88442099	64884.42099		388064.7258			
Los Angeles (SC)	2026	LDA	Aggregate	Aggregate	Gasoline	3219652.786	125598332.2	4156.999113	4156999.113	4242481.146	125598332.2	140494683.9	33.12	LDA
Los Angeles (SC)	2026	LDA	Aggregate	Aggregate	Diesel	7348.716503	212062.0866	5.149764542	5149.764542		212062.0866			
Los Angeles (SC)	2026	LDA	Aggregate	Aggregate	Electricity	209865.581	10019447.29	0	0		10019447.29			
Los Angeles (SC)	2026	LDA	Aggregate	Aggregate	Plug-in Hybrid	103430.6361	4664842.379	80.33226876	80332.26876		4664842.379			
Los Angeles (SC)	2026	LDT1	Aggregate	Aggregate	Gasoline	303121.7183	10988219.26	436.9194811	436919.4811	437683.1643	10988219.26	11090768.71	25.34	LDT1
Los Angeles (SC)	2026	LDT1	Aggregate	Aggregate	Diesel	88.7979738	1718.50539	0.074204054	74.20405391		1718.50539			
Los Angeles (SC)	2026	LDT1	Aggregate	Aggregate	Electricity	1265.851297	56656.04808	0	0		56656.04808			
Los Angeles (SC)	2026	LDT1	Aggregate	Aggregate	Plug-in Hybrid	890.9485459	44174.8973	0.689479092	689.4790918		44174.8973			
Los Angeles (SC)	2026	LDT2	Aggregate	Aggregate	Gasoline	1632990.627	66847121.76	2677.276355	2677276.355	2698876.906	66847121.76	68582011.91	25.41	LDT2
Los Angeles (SC)	2026	LDT2	Aggregate	Aggregate	Diesel	5437.834714	230831.6694	7.025538956	7025.538956		230831.6694			
Los Angeles (SC)	2026	LDT2	Aggregate	Aggregate	Electricity	17319.28615	613691.4866	0	0		613691.4866			
Los Angeles (SC)	2026	LDT2	Aggregate	Aggregate	Plug-in Hybrid	18786.14155	890366.9989	14.57501217	14575.01217		890366.9989			
Los Angeles (SC)	2026	LHDT1	Aggregate	Aggregate	Gasoline	123929.2199	4960391.725	351.17062	351170.62	481998.3017	4960391.725	7842646.775	16.27	LHDT1
Los Angeles (SC)	2026	LHDT1	Aggregate	Aggregate	Diesel	61552.22012	2704306.099	130.8276817	130827.6817		2704306.099			
Los Angeles (SC)	2026	LHDT1	Aggregate	Aggregate	Electricity	2671.099104	177948.9511	0	0	126318.5559	177948.9511	1956182.403	15.49	LHDT2
Los Angeles (SC)	2026	LHDT2	Aggregate	Aggregate	Gasoline	18802.30269	702537.4457	57.21721911	57217.21911		702537.4457			
Los Angeles (SC)	2026	LHDT2	Aggregate	Aggregate	Diesel	28207.89186	1209848.539	69.10133677	69101.33677	24235.05076	1209848.539	1005181.469	41.48	MCY
Los Angeles (SC)	2026	LHDT2	Aggregate	Aggregate	Electricity	691.3171043	43796.419	0	0	1829186.939	43796.419	38233993.02	20.90	MDV
Los Angeles (SC)	2026	MCY	Aggregate	Aggregate	Gasoline	153887.3138	1005181.469	24.23505076	24235.05076		1005181.469			
Los Angeles (SC)	2026	MDV	Aggregate	Aggregate	Gasoline	964398.5458	36646219.44	1803.349906	1803349.906		36646219.44			
Los Angeles (SC)	2026	MDV	Aggregate	Aggregate	Diesel	11199.92317	428851.9709	17.49813003	17498.13003		428851.9709			
Los Angeles (SC)	2026	MDV	Aggregate	Aggregate	Electricity	18645.2319	659895.0843	0	0	36235.25834	659895.0843	206291.2031	5.69	MH
Los Angeles (SC)	2026	MDV	Aggregate	Aggregate	Plug-in Hybrid	11391.54804	499026.5259	8.338902977	8338.902977		499026.5259			
Los Angeles (SC)	2026	MH	Aggregate	Aggregate	Gasoline	14307.03368	146047.5722	30.18050526	30180.50526	432346.7032	146047.5722	3398646.229	7.86	MHDT
Los Angeles (SC)	2026	MH	Aggregate	Aggregate	Diesel	5685.026918	60243.63088	6.054753085	6054.753085		60243.63088			
Los Angeles (SC)	2026	MHDT	Aggregate	Aggregate	Gasoline	14018.64483	760040.5963	144.2836857	144283.6857		760040.5963			
Los Angeles (SC)	2026	MHDT	Aggregate	Aggregate	Diesel	61381.38023	2536950.689	282.4978542	282497.8542		2536950.689			
Los Angeles (SC)	2026	MHDT	Aggregate	Aggregate	Electricity	1016.757423	56341.7981	0	0	51620.84435	56341.7981	320927.8184	6.22	OBUS
Los Angeles (SC)	2026	MHDT	Aggregate	Aggregate	Natural Gas	983.1551606	45313.1448	5.565163339	5565.163339		45313.1448			
Los Angeles (SC)	2026	OBUS	Aggregate	Aggregate	Gasoline	3466.029388	130669.0411	25.46693943	25466.93943		130669.0411			
Los Angeles (SC)	2026	OBUS	Aggregate	Aggregate	Diesel	2204.359751	167083.6645	23.79556615	23795.56615	20245.30514	167083.6645	133175.7822	6.58	SBUS
Los Angeles (SC)	2026	OBUS	Aggregate	Aggregate	Electricity	32.17174938	2316.377191	0	0		2316.377191			
Los Angeles (SC)	2026	OBUS	Aggregate	Aggregate	Natural Gas	358.9603738	20858.73557	2.358338765	2358.338765		20858.73557			
Los Angeles (SC)	2026	SBUS	Aggregate	Aggregate	Gasoline	1439.394428	63136.50277	6.985775097	6985.775097		63136.50277			
Los Angeles (SC)	2026	SBUS	Aggregate	Aggregate	Diesel	1484.919634	29449.64017	4.00274451	4002.74451	138225.3819	29449.64017	455208.2004	3.29	UBUS
Los Angeles (SC)	2026	SBUS	Aggregate	Aggregate	Electricity	43.7276656	1385.007139	0	0		1385.007139			
Los Angeles (SC)	2026	SBUS	Aggregate	Aggregate	Natural Gas	1619.758995	39204.63215	9.256785533	9256.785533		39204.63215			
Los Angeles (SC)	2026	UBUS	Aggregate	Aggregate	Gasoline	435.2433216	30711.79502	6.645484972	6645.484972		30711.79502			
Los Angeles (SC)	2026	UBUS	Aggregate	Aggregate	Diesel	6.30137858	935.3704801	0.161043189	161.0431889		935.3704801			
Los Angeles (SC)	2026	UBUS	Aggregate	Aggregate	Electricity	172.837956	17147.4887	0	0		17147.4887			
Los Angeles (SC)	2026	UBUS	Aggregate	Aggregate	Natural Gas	3794.807103	406413.5462	131.4188537	131418.8537		406413.5462			