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April 2, 2025
Project No. 25-17501

Lorraine Larson, Executive Director
Nevada County Habitat for Humanity
P.O. Box 2997
Grass Valley, California 95945
Via email: lorraine@nchabitat.org

Subject: Greenhouse Gas (GHG) Letter Report for Habitat for Humanity Gates Place Project, City of Grass Valley, California

Dear Ms. Larson:

Rincon Consultants, Inc. (Rincon) has prepared this technical letter to evaluate potential greenhouse gas (GHG) emissions impacts resulting from construction and operation of the Habitat for Humanity Gates Place Project (herein referred to as “project”), located in the City of Grass Valley, California.

Description of Project

The project would construct and operate a sixteen (16) single-residence subdivision on a 2.01-acre site. Project construction is expected to start in January 2027 and consists of residential and fence installation and landscaping activities. Construction activity is anticipated to take place five days a week, Monday through Friday.

Greenhouse Gas Regulations

The following sections provide an overview of relevant federal, state and local regulations related to GHG emissions.

Federal GHG Emissions Regulation

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 497) held that the United States Environmental Protection Agency (U.S. EPA) has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines, and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that establishes the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of best available control technology.



State Regulations

Assembly Bill 32 (Global Warming Solutions Act and Scoping Plan)

California's major initiative for reducing GHG emissions is outlined in Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006," which was signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 Statewide GHG level and 2020 limit of 427 million MTCO_{2e}. The Scoping Plan was approved by CARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan Update defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 Statewide goals. The 2013 Scoping Plan Update highlighted California's progress toward meeting the 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use. The State of California achieved its 2020 GHG emission reduction targets in 2016, and emissions have subsequently fallen further in 2018 to 425 MMTCO_{2e}.

Senate Bill 32 (Global Warming Solutions Act and Scoping Plan Extension)

Senate Bill (SB) 32 signed into law on September 8, 2016, tightens the requirements of AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383. The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, it recommends that local governments adopt policies consistent with statewide per capita goals of 6 MTCO_{2e} by 2030 and 2 MTCO_{2e} by 2050. As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level).

AB 1279 (California Climate Crisis Act and Scoping Plan Extension)

The California Climate Crisis Act (AB 1279), signed into law on September 16, 2022, requires the State to achieve and maintain net zero GHG emissions as soon as possible, but not later than 2045. The Climate Crisis Act also requires the State to reduce Statewide anthropogenic GHG emissions to 85 percent below the 1990 levels by 2045. Updates to the Scoping Plan are required to identify and recommend measures to achieve these goals and identify and implement policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in the State.

On November 16, 2022, CARB also adopted the 2022 Scoping Plan, which provides a framework for achieving targets for carbon neutrality and reducing anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The 2022 Scoping Plan relies on



significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

California Code of Regulations Title 24 (California Building Code)

The California Energy Commission (CEC) first adopted the Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

Part 11 of the Title 24 Building Standards is referred to as the California Green Building Standards (CALGreen) Code and was developed to help the State achieve its GHG reduction goals under HSC Division 25.5 (e.g., AB 32) by codifying standards for reducing building-related energy, water, and resource demand, which in turn reduces GHG emissions from energy consumption, water storage and delivery, and other resource consumption activities. The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental air quality.” The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality.

On August 11, 2021, the CEC adopted the 2022 Title 24 Standards, which went into effect on January 1, 2023. The 2022 standards continue to improve upon the previous (2019) Title 24 standards for new construction of, and additions and alterations to, residential and non-residential buildings. The 2022 Title 24 Standards “build on California’s technology innovations, encouraging energy efficient approaches to encourage building decarbonization, emphasizing in particular on heat pumps for space heating and water heating. This set of Energy Codes also extends the benefits of photovoltaic and battery storage systems and other demand flexible technology to work in combinations with heat pumps to enable California buildings to be responsive to climate change. This Energy code also strengthens ventilation standards to improve indoor air quality. This update provides crucial steps in the state’s progress toward 100 percent clean carbon neutrality by midcentury. The 2022 Energy Code is anticipated to reduce GHG emissions by 10 MMT of CO₂e over the next 30 years and result in approximately 1.5 billion dollars in consumer savings. Compliance with Title 24 is enforced through the building permit process.

Regional and Local Regulations

Northern Sierra Air Quality Management District

The project falls under the jurisdiction of the Northern Sierra Air Quality Management District (NSAQMD). The NSAQMD was established in 1986 through the merger of the Air Pollution Control



Districts from Nevada, Plumas, and Sierra Counties. Under state law, the District must meet and maintain both federal and state Ambient Air Quality Standards (the NAAQS and CAAQS), which are designed to safeguard public health. Co-benefits associated with air quality reductions and policies include reductions in energy use and associated GHG emissions (NSAQMD 2025). The NSAQMD has not promulgated any rules aimed at regulating GHG emissions, nor has it established a significance threshold for construction or operational emissions.

City of Grass Valley Energy Action Plan

In 2018, Grass Valley launched its Energy Action Plan (EAP), which analyzes energy consumption within the city, both from the community and City-operated facilities. The plan also outlines strategies to enhance energy efficiency, water conservation, and renewable energy initiatives already in progress. Its purpose is to help the City achieve the energy and water-related objectives outlined in the General Plan and Housing Element, while also educating residents about affordable programs and best practices to save both energy and money. These actions can cut GHG emissions, mitigating the future impacts of climate change. By following the EAP and taking action at both the community and city levels, Grass Valley could reduce its energy consumption by 42,466,551 kWh of electricity (a 36 percent decrease) and 1,410,586 therms of natural gas (a 29 percent decrease) (City of Grass Valley 2018). The following goals and strategies would be applicable to the project:

- **Goal 1 - Improve Energy Efficiency in Buildings, Facilities, and City Operations**
 - Strategy 1.1: Expand outreach and education on existing energy efficiency practices, programs, and financing options for residential and non-residential utility customers.
 - Strategy 1.2: Improve compliance with current California Building Energy Efficiency Standards (Title 24, Part 6) by providing informational materials when available.
- **Goal 2 – Expand the Utilization of Renewable Energy and Resilience Measures**
 - Strategy 2.1: Prepare for the inclusion of renewable energy systems in new construction and large retrofit projects in order to meet California Zero Net Energy Goals by providing informational material when available.

2020 City of Grass Valley General Plan

The General Plan serves as a strategic guide for the growth and development of Grass Valley and the surrounding unincorporated area, collectively referred to as the Planning Area. Grass Valley is home to about 55 percent of Nevada County’s multi-family housing units, despite accounting for only 12 percent of the county’s total housing stock. Almost 60 percent of the city’s residents are renters, making Grass Valley the primary hub for rental and multi-family housing in the region. Infill development on undeveloped land within the City of Grass Valley is an important facet of the 2020 General Plan. The 2020 General Plan outlines goals, policies, and actions across several key areas, including Land Use, Circulation, Conservation/Open Space, Noise, Safety, Recreation, Historical Preservation, and Community Design (City of Grass Valley 2020). The following goals and policies from the General Plan are most applicable to the project:

- **5-LUG.** Provide for a broad range of housing opportunities, including opportunities for low-, moderate- and middle-income households.
 - 12-LUO Designation of residential building sites sufficient in number and variety to meet projected demand.
 - 13-LUO Provision of sufficient affordable housing units for those working in Grass Valley.



- 14-LUO Utilization of available programs to promote the construction of affordable housing.
- **4-LUP.** Identify areas appropriate for infill development and show them on the Land Use Diagram.
- **5-LUP.** Actively market infill and available parcels during contacts with developers and community members
- **11-CDP.** Provide connections for automobiles, bicycles and/or pedestrians in new development wherever needed to facilitate convenient access and connections with the larger community.

Significance Thresholds

To determine whether a project would result in a significant impact to GHGs, Appendix G of the CEQA Guidelines requires consideration of whether a project would:

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

The City of Grass Valley has not conducted a GHG inventory or adopted a Climate Action Plan (CAP), performance standards, or a GHG efficiency metric. Similarly, the NSAQMD has not established a numerical GHG threshold of significance. The City of Grass Valley has, however, adopted an Energy Action Plan and the Grass Valley 2020 General Plan.

In the absence of a numerical GHG threshold, construction and operational GHG emissions were quantified for disclosure purposes using the most recently available version of the California Emissions Estimator Model (CalEEMod). This is consistent with NSAQMD's *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects*, which recommends that GHG emissions should be quantified for decision-makers and the public to consider, although there is no established threshold of significance (NSAQMD 2024).

The project will also be analyzed for consistency with the California Air Resources Board (CARB) 2022 Scoping Plan and the City of Grass Valley Energy Action Plan and 2020 General Plan.

Methodology

A plan consistency analysis is provided below. Emissions of GHGs are calculated and provided for disclosure purposes, as there are no numerical GHG thresholds. Air pollutant emissions generated by project construction and operation were estimated using CalEEMod, version 2022.1. The analysis reflects the construction and operation of the project as described under Description of Project.

Construction emissions modeled include those generated by construction equipment used on-site and those generated by vehicle trips associated with construction, such as worker and vendor trips. Project construction is assumed to begin in January 2027 for a duration of thirteen months. Excavation and/or grading would occur during construction, and therefore there would be approximately 1,012 cubic yards (CY) of soil import. Exact equipment used during construction is currently unknown; therefore, we relied on CalEEMod default assumptions for construction schedule, equipment list, etc.

Operation of the project would consist of mobile source emissions, area and energy use of the proposed residences, as well as waste, wastewater, and water usage. In the absence of project-specific information, this analysis relied upon default values provided by CalEEMod.



Impact Analysis

Issue 1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Issue 2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction and operation of the project would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of CO₂, CH₄, and N₂O emissions are provided to identify the magnitude of potential project effects.

Construction Emissions

NSAQMD does not have numeric thresholds for construction-related GHG emissions. Nonetheless, construction emissions are outlined in Table 1 for informational purposes. Construction of the project would generate temporary GHG emissions, primarily from operation of construction equipment and truck trips. As shown in Table 1, project construction would generate approximately 274 metric tons (MT) of CO_{2e}. When amortized over the lifetime of the project (30 years), project construction would produce approximately 9 MT of CO_{2e} annually.

Table 1 Construction Emissions of Greenhouse Gases

Construction Year	Annual Emissions (MT/year)
2027	272
2028	2
Total	274
Total (Amortized over 30 years)	9.1

MT = metric tons

Source: Attachment A, Table 2.2. "Construction Emissions by Year, Unmitigated", Annual.

Operational Emissions

GHG emissions would be generated by mobile (transportation) sources as well as through operation of the proposed buildings, which would generate waste and require electricity and water usage. Table 2 provides the annual GHG emissions for the project. As shown therein, the project would generate approximately 194 MT of CO_{2e} per year.



Table 2 Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (MT CO₂e)
Project Operational	
Mobile	124
Area	20
Energy	38
Water	1
Waste	2
Refrigerants	<1
Construction (Amortized)	9
Total	194

MT = metric tons
 Source: Attachment A, Table 2.5 "Operations Emissions by Sector, Unmitigated", Annual.

Consistency with GHG Reduction Plans and Policies

Several plans and policies have been adopted to reduce GHG emissions in the project region, including the State’s 2022 Scoping Plan, the City of Grass Valley’s Energy Action Plan, and the City’s 2020 General Plan. The project’s consistency with these plans is discussed in the following subsections. As discussed therein, the project would not conflict with plans and policies aimed at reducing GHG emissions.

2022 Scoping Plan

The principal State plans and policies for reducing GHG emissions are AB 32, SB 32, SB 375, and AB 1279. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020; the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030; the goal of SB 375 is to link transportation planning and land use planning; and the goal of AB 1279 is to achieve net zero greenhouse gas emissions no later than 2045 (reduce GHG emissions by 85 percent below 1990 levels no later than 2045). The 2022 Scoping Plan expands upon earlier plans to include the AB 1279 targets. The 2022 Scoping Plan’s strategies that are applicable to the project include reducing fossil fuel use and vehicle miles traveled (VMT) via project siting; decarbonizing the electricity sector through the addition of solar panels; and increasing water conservation via installation of efficient showers, toilets and other appliances.

The project would be consistent with these goals through project design, which includes installing solar PV, installing low-flow fixtures, and providing energy-efficient appliances. Furthermore, the project site would provide connections for automobiles, bicycles and/or pedestrians in new development wherever needed to facilitate convenient access and connections with the larger community and would provide easy access to Gates Place and the Nevada City Highway directly adjacent to the site. These efforts would help reduce VMT. Therefore, the project would be consistent with the 2022 Scoping Plan.

City of Grass Valley Energy Action Plan

The goals and strategies provided in Chapter 3 of the Energy Action Plan are focused on improving the City of Grass Valley’s community energy efficiency by broadening the reach of existing programs, expanding renewable energy utilization, and employing efficient practices that address the water-



energy nexus (City of Grass Valley 2018). It is assumed that the project would be consistent with strategies under Goal 1 – Improve Energy Efficiency in Buildings, Facilities, and City Operations. Specifically, the project would be consistent with Strategy 1.2 under this Goal – “Improve compliance with current California Building Energy Efficiency Standards (Title 24, Part 6) by providing informational materials when available,” as the project would comply with Title 24 Building Standards. Additionally, the project would be consistent with Strategy 1.1 – “Expand outreach and education on existing energy efficiency practices, programs, and financing options for residential and non-residential utility customers.” The project proposes to construct 16 single family houses on an approximately two-acre site. New residents who occupy these houses have the ability to take advantage of the City’s various programs to improve energy efficiency and reduce their overall GHG footprint through the use of these programs.

Additionally, the project would be consistent with Goal 2 - Expand the Utilization of Renewable Energy and Resilience Measures and the strategies under this Goal. Specifically, the project would comply with Strategy 2.1 – “Prepare for the inclusion of renewable energy systems in new construction and large retrofit projects in order to meet California Zero Net Energy Goals by providing informational material when available.” Therefore, the project would be consistent with the City of Grass Valley Energy Action Plan.

City of Grass Valley General Plan

The project would be consistent with applicable measures, goals, and policies provided in the City of Grass Valley’s General Plan. For example, the project proposes to develop 16 affordable, single-family houses on an approximately two-acre site. By providing additional low-income housing to the City, the project is consistent with goals related to meeting projected residential demand while addressing affordability of housing, including:

- **5-LUG.** Provide for a broad range of housing opportunities, including opportunities for low-, moderate- and middle-income households.
 - 12-LUO Designation of residential building sites sufficient in number and variety to meet projected demand.
 - 13-LUO Provision of sufficient affordable housing units for those working in Grass Valley.
 - 14-LUO Utilization of available programs to promote the construction of affordable housing.

Additionally, under 4-LUP of the General Plan, the City encourages the identification of areas appropriate for infill development, including undeveloped land, and under 5-LUP, the City encourages actively marketing infill and available parcels during contacts with developers and community members. The project is fulfilling this need by identifying a previously undeveloped parcel of land and developing it to accommodate affordable housing for the region.

Finally, the project would be consistent with 11-CDP, which requires that developers provide connections for automobiles, bicycles and/or pedestrians in new development wherever needed to facilitate convenient access and connections with the larger community. The project site would provide these connections during project construction and siting, and would provide easy access to Gates Place and the Nevada City Highway directly adjacent to the site. For these reasons, the project would be consistent with the City of Grass Valley General Plan.



Conclusion

Operational and construction emissions associated with the project would not generate significant GHG emissions. In addition, the project would not conflict with any applicable GHG reduction or Climate Action Plan, including the CARB 2022 Scoping Plan and the City of Grass Valley Energy Action Plan and 2020 General Plan. Based on the findings of this GHG Letter Report, the project would not result in significant GHG impacts associated with construction and operation of the project.

If there are any questions regarding this letter report, please contact Jessie Jaeger at jjjaeger@rinconconsultants.com or Michael Stewart at mstewart@rinconconsultants.com.

Sincerely,

Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "JJ", with a long horizontal flourish extending to the right.

Jessie Jaeger, MCP, MPH
Air Quality Specialist

A handwritten signature in blue ink, appearing to read "Michael Stewart", with a long horizontal flourish extending to the right.

Michael Stewart, PE
Senior Air Quality Specialist

Attachment

Attachment A CalEEMod Outputs



References

- Grass Valley, City of. 2018. City of Grass Valley Energy Action Plan. https://www.cityofgrassvalley.com/sites/main/files/file-attachments/attachment_file-energy_action_plan.pdf?1680817017 (accessed March 2025).
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- _____. 2025. Air District Rules and Regulations. <https://www.myairdistrict.com/rules> (accessed March 2025).

Attachment A

CalEEMod Output

Habitat for Humanity Gates Place Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Habitat for Humanity Gates Place
Construction Start Date	1/1/2027
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.40
Precipitation (days)	2.20
Location	39.24001280956225, -121.03428780004482
County	Nevada
City	Grass Valley
Air District	Northern Sierra AQMD
Air Basin	Mountain Counties
TAZ	265
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	16.0	Dwelling Unit	2.01	31,200	187,406	0.00	36.0	—

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.	1.39	1.16	9.76	12.0	0.02	0.32	0.05	0.38	0.30	0.01	0.31	—	2,283	2,283	0.09	0.03	0.27	2,293
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	97.8	97.8	14.1	15.0	0.03	0.57	3.23	3.80	0.52	1.46	1.98	—	3,923	3,923	0.12	0.24	0.08	3,999
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.68	2.68	7.02	8.59	0.02	0.24	0.10	0.34	0.22	0.03	0.25	—	1,638	1,638	0.07	0.02	0.11	1,646
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.49	0.49	1.28	1.57	< 0.005	0.04	0.02	0.06	0.04	0.01	0.05	—	271	271	0.01	< 0.005	0.02	272

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.39	1.16	9.76	12.0	0.02	0.32	0.05	0.38	0.30	0.01	0.31	—	2,283	2,283	0.09	0.03	0.27	2,293

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.74	1.44	14.1	15.0	0.03	0.57	3.23	3.80	0.52	1.46	1.98	—	3,923	3,923	0.12	0.24	0.08	3,999
2028	97.8	97.8	5.59	8.77	0.01	0.20	0.11	0.31	0.19	0.03	0.21	—	1,351	1,351	0.05	0.01	0.01	1,357
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.99	0.82	7.02	8.59	0.02	0.24	0.10	0.34	0.22	0.03	0.25	—	1,638	1,638	0.07	0.02	0.11	1,646
2028	2.68	2.68	0.04	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.18	9.18	< 0.005	< 0.005	< 0.005	9.22
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.18	0.15	1.28	1.57	< 0.005	0.04	0.02	0.06	0.04	0.01	0.05	—	271	271	0.01	< 0.005	0.02	272
2028	0.49	0.49	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.53

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.	17.2	16.7	1.14	24.9	0.05	2.73	0.63	3.36	2.71	0.16	2.87	306	1,229	1,535	0.96	0.07	2.88	1,582
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.1	16.6	1.23	24.2	0.05	2.73	0.63	3.36	2.71	0.16	2.87	306	1,189	1,495	0.97	0.07	0.29	1,542
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.26	5.11	0.86	9.15	0.02	0.63	0.61	1.24	0.62	0.16	0.78	72.5	1,012	1,085	0.65	0.05	1.35	1,118
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.96	0.93	0.16	1.67	< 0.005	0.11	0.11	0.23	0.11	0.03	0.14	12.0	168	180	0.11	0.01	0.22	185

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	0.91	0.86	0.59	4.26	0.01	0.01	0.63	0.64	0.01	0.16	0.17	—	782	782	0.05	0.04	2.66	798
Area	16.3	15.9	0.43	20.6	0.04	2.71	—	2.71	2.69	—	2.69	301	219	520	0.41	0.02	—	537
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	225	225	0.03	< 0.005	—	227
Water	—	—	—	—	—	—	—	—	—	—	—	0.88	2.83	3.71	0.09	< 0.005	—	6.62
Waste	—	—	—	—	—	—	—	—	—	—	—	3.87	0.00	3.87	0.39	0.00	—	13.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Total	17.2	16.7	1.14	24.9	0.05	2.73	0.63	3.36	2.71	0.16	2.87	306	1,229	1,535	0.96	0.07	2.88	1,582
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.86	0.81	0.69	4.55	0.01	0.01	0.63	0.64	0.01	0.16	0.17	—	745	745	0.06	0.05	0.07	760
Area	16.2	15.8	0.42	19.6	0.04	2.71	—	2.71	2.69	—	2.69	301	217	518	0.41	0.02	—	534
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	225	225	0.03	< 0.005	—	227
Water	—	—	—	—	—	—	—	—	—	—	—	0.88	2.83	3.71	0.09	< 0.005	—	6.62
Waste	—	—	—	—	—	—	—	—	—	—	—	3.87	0.00	3.87	0.39	0.00	—	13.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Total	17.1	16.6	1.23	24.2	0.05	2.73	0.63	3.36	2.71	0.16	2.87	306	1,189	1,495	0.97	0.07	0.29	1,542
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.84	0.79	0.64	4.24	0.01	0.01	0.61	0.62	0.01	0.16	0.16	—	734	734	0.05	0.05	1.12	750
Area	4.41	4.31	0.10	4.86	0.01	0.61	—	0.61	0.60	—	0.60	67.7	49.8	118	0.09	< 0.005	—	121
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	225	225	0.03	< 0.005	—	227
Water	—	—	—	—	—	—	—	—	—	—	—	0.88	2.83	3.71	0.09	< 0.005	—	6.62
Waste	—	—	—	—	—	—	—	—	—	—	—	3.87	0.00	3.87	0.39	0.00	—	13.5

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Total	5.26	5.11	0.86	9.15	0.02	0.63	0.61	1.24	0.62	0.16	0.78	72.5	1,012	1,085	0.65	0.05	1.35	1,118
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.15	0.14	0.12	0.77	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	122	122	0.01	0.01	0.19	124
Area	0.80	0.79	0.02	0.89	< 0.005	0.11	—	0.11	0.11	—	0.11	11.2	8.25	19.5	0.02	< 0.005	—	20.1
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.3	37.3	< 0.005	< 0.005	—	37.5
Water	—	—	—	—	—	—	—	—	—	—	—	0.15	0.47	0.61	0.01	< 0.005	—	1.10
Waste	—	—	—	—	—	—	—	—	—	—	—	0.64	0.00	0.64	0.06	0.00	—	2.24
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.96	0.93	0.16	1.67	< 0.005	0.11	0.11	0.23	0.11	0.03	0.14	12.0	168	180	0.11	0.01	0.22	185

3. Construction Emissions Details

3.1. Demolition (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	1.60	1.34	12.4	14.4	0.02	0.47	—	0.47	0.43	—	0.43	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	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	0.09	0.07	0.68	0.79	< 0.005	0.03	—	0.03	0.02	—	0.02	—	137	137	0.01	< 0.005	—	137
Demolition	—	—	—	—	—	—	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	0.02	0.01	0.12	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.6	22.6	< 0.005	< 0.005	—	22.7
Demolition	—	—	—	—	—	—	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	0.06	0.06	0.05	0.52	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	91.0	91.0	< 0.005	< 0.005	0.01	92.3
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	0.01	5.13
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	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.85
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. Site Preparation (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	1.29	1.08	9.07	10.8	0.03	0.39	—	0.39	0.36	—	0.36	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.3	22.3	< 0.005	< 0.005	—	22.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.70	3.70	< 0.005	< 0.005	—	3.71
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.31	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.6	54.6	< 0.005	< 0.005	0.01	55.4
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.46
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
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

3.5. Grading (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	1.63	1.37	12.2	13.9	0.02	0.54	—	0.54	0.50	—	0.50	—	2,455	2,455	0.10	0.02	—	2,464
Dust From Material Movement	—	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.4	40.4	< 0.005	< 0.005	—	40.5
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.71
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.42	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	72.8	72.8	< 0.005	< 0.005	0.01	73.8
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	0.06	0.03	1.84	0.43	0.01	0.03	0.39	0.42	0.03	0.11	0.14	—	1,394	1,394	0.02	0.22	0.07	1,461
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.21	1.21	< 0.005	< 0.005	< 0.005	1.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.9	22.9	< 0.005	< 0.005	0.02	24.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.79	3.79	< 0.005	< 0.005	< 0.005	3.98

3.7. Building Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30	—	2,201	2,201	0.09	0.02	—	2,208
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	1.35	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30	—	2,201	2,201	0.09	0.02	—	2,208
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	0.82	0.68	5.84	7.05	0.01	0.19	—	0.19	0.18	—	0.18	—	1,327	1,327	0.05	0.01	—	1,331
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	0.15	0.12	1.07	1.29	< 0.005	0.04	—	0.04	0.03	—	0.03	—	220	220	0.01	< 0.005	—	220
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	0.03	0.03	0.02	0.26	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	45.2	45.2	< 0.005	< 0.005	0.18	46.0
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.5	36.5	< 0.005	0.01	0.09	38.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.24	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.9	41.9	< 0.005	< 0.005	< 0.005	42.5
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.5	36.5	< 0.005	0.01	< 0.005	38.1
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	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.6	25.6	< 0.005	< 0.005	0.05	26.0
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.0	22.0	< 0.005	< 0.005	0.02	23.0
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	< 0.005	< 0.005	—	4.24	4.24	< 0.005	< 0.005	0.01	4.31
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.80
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (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	0.77	0.65	5.74	8.20	0.01	0.23	—	0.23	0.21	—	0.21	—	1,244	1,244	0.05	0.01	—	1,248
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.6	31.6	< 0.005	< 0.005	—	31.8
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.24	5.24	< 0.005	< 0.005	—	5.26
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.63	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	111

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	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.82	2.82	< 0.005	< 0.005	0.01	2.86
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.47
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. Paving (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.53	8.18	0.01	0.20	—	0.20	0.19	—	0.19	—	1,244	1,244	0.05	0.01	—	1,248
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.87	4.87	< 0.005	< 0.005	—	4.88
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.59	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.01	109
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	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.43	0.43	< 0.005	< 0.005	< 0.005	0.43
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
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. Architectural Coating (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	97.6	97.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	2.68	2.68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Architectural Coatings	0.49	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.25	8.25	< 0.005	< 0.005	< 0.005	8.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	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	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.91	0.86	0.59	4.26	0.01	0.01	0.63	0.64	0.01	0.16	0.17	—	782	782	0.05	0.04	2.66	798
Total	0.91	0.86	0.59	4.26	0.01	0.01	0.63	0.64	0.01	0.16	0.17	—	782	782	0.05	0.04	2.66	798
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.86	0.81	0.69	4.55	0.01	0.01	0.63	0.64	0.01	0.16	0.17	—	745	745	0.06	0.05	0.07	760
Total	0.86	0.81	0.69	4.55	0.01	0.01	0.63	0.64	0.01	0.16	0.17	—	745	745	0.06	0.05	0.07	760
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.15	0.14	0.12	0.77	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	122	122	0.01	0.01	0.19	124
Total	0.15	0.14	0.12	0.77	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	122	122	0.01	0.01	0.19	124

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	76.2	76.2	0.01	< 0.005	—	77.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	76.2	76.2	0.01	< 0.005	—	77.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	76.2	76.2	0.01	< 0.005	—	77.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	76.2	76.2	0.01	< 0.005	—	77.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6	< 0.005	< 0.005	—	12.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6	< 0.005	< 0.005	—	12.7

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	149	149	0.01	< 0.005	—	150
Total	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	149	149	0.01	< 0.005	—	150
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	149	149	0.01	< 0.005	—	150
Total	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	149	149	0.01	< 0.005	—	150
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.7	24.7	< 0.005	< 0.005	—	24.8
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.7	24.7	< 0.005	< 0.005	—	24.8

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	15.3	14.9	0.42	19.6	0.04	2.71	—	2.71	2.69	—	2.69	301	217	518	0.41	0.02	—	534
Consumer Products	0.67	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.08	0.08	0.01	0.91	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.43	2.43	< 0.005	< 0.005	—	2.44
Total	16.3	15.9	0.43	20.6	0.04	2.71	—	2.71	2.69	—	2.69	301	219	520	0.41	0.02	—	537
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	15.3	14.9	0.42	19.6	0.04	2.71	—	2.71	2.69	—	2.69	301	217	518	0.41	0.02	—	534
Consumer Products	0.67	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	16.2	15.8	0.42	19.6	0.04	2.71	—	2.71	2.69	—	2.69	301	217	518	0.41	0.02	—	534
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.63	0.61	0.02	0.81	< 0.005	0.11	—	0.11	0.11	—	0.11	11.2	8.05	19.3	0.02	< 0.005	—	19.9
Consumer Products	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.20	0.20	< 0.005	< 0.005	—	0.20
Total	0.80	0.79	0.02	0.89	< 0.005	0.11	—	0.11	0.11	—	0.11	11.2	8.25	19.5	0.02	< 0.005	—	20.1

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.88	2.83	3.71	0.09	< 0.005	—	6.62
Total	—	—	—	—	—	—	—	—	—	—	—	0.88	2.83	3.71	0.09	< 0.005	—	6.62
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.88	2.83	3.71	0.09	< 0.005	—	6.62
Total	—	—	—	—	—	—	—	—	—	—	—	0.88	2.83	3.71	0.09	< 0.005	—	6.62
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.15	0.47	0.61	0.01	< 0.005	—	1.10
Total	—	—	—	—	—	—	—	—	—	—	—	0.15	0.47	0.61	0.01	< 0.005	—	1.10

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.87	0.00	3.87	0.39	0.00	—	13.5
Total	—	—	—	—	—	—	—	—	—	—	—	3.87	0.00	3.87	0.39	0.00	—	13.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.87	0.00	3.87	0.39	0.00	—	13.5
Total	—	—	—	—	—	—	—	—	—	—	—	3.87	0.00	3.87	0.39	0.00	—	13.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.64	0.00	0.64	0.06	0.00	—	2.24
Total	—	—	—	—	—	—	—	—	—	—	—	0.64	0.00	0.64	0.06	0.00	—	2.24

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	------	------

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)

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2027	1/29/2027	5.00	20.0	—
Site Preparation	Site Preparation	1/30/2027	2/3/2027	5.00	3.00	—
Grading	Grading	2/4/2027	2/12/2027	5.00	6.00	—
Building Construction	Building Construction	2/13/2027	12/18/2027	5.00	220	—
Paving	Paving	12/19/2027	1/2/2028	5.00	10.0	—
Architectural Coating	Architectural Coating	1/3/2028	1/17/2028	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29

Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	10.5	LDA,LDT1,LDT2
Demolition	Vendor	—	7.02	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	10.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.02	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	10.0	10.5	LDA,LDT1,LDT2
Grading	Vendor	—	7.02	HHDT,MHDT
Grading	Hauling	21.2	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	5.76	10.5	LDA,LDT1,LDT2
Building Construction	Vendor	1.71	7.02	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	10.5	LDA,LDT1,LDT2
Paving	Vendor	—	7.02	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.15	10.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.02	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	63,180	21,060	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	0.00	—
Site Preparation	0.00	0.00	4.50	0.00	—
Grading	1,012	0.00	6.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.18

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.18	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	151	153	137	54,471	871	880	789	314,066

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	3
Gas Fireplaces	5
Propane Fireplaces	4
Electric Fireplaces	0
No Fireplaces	3
Conventional Wood Stoves	0
Catalytic Wood Stoves	1
Non-Catalytic Wood Stoves	1
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
63180	21,060	0.00	0.00	—

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	136,411	204	0.0330	0.0040	465,440

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	457,360	2,252,308

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	7.17	—

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
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16.1. Emergency Generators and Fire Pumps

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

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

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

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

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	31.4	annual days of extreme heat
Extreme Precipitation	25.1	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	25.5	annual hectares burned

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

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

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	4	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	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	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	4	1	1	4
Sea Level Rise	N/A	N/A	N/A	N/A
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	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	N/A

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	82.5
AQ-PM	0.95
AQ-DPM	33.7
Drinking Water	38.3
Lead Risk Housing	57.3
Pesticides	50.7
Toxic Releases	3.74
Traffic	24.9
Effect Indicators	—
CleanUp Sites	96.1
Groundwater	85.1
Haz Waste Facilities/Generators	57.5
Impaired Water Bodies	33.2
Solid Waste	75.7
Sensitive Population	—
Asthma	66.4

Cardio-vascular	40.2
Low Birth Weights	50.5
Socioeconomic Factor Indicators	—
Education	31.7
Housing	68.1
Linguistic	0.00
Poverty	56.7
Unemployment	63.4

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	30.19376363
Employed	27.51186963
Median HI	17.61837547
Education	—
Bachelor's or higher	55.29321186
High school enrollment	4.208905428
Preschool enrollment	66.85486975
Transportation	—
Auto Access	13.73027076
Active commuting	69.38277942
Social	—
2-parent households	17.50288721
Voting	82.29180033
Neighborhood	—
Alcohol availability	53.20159117

Park access	15.50109072
Retail density	51.9183883
Supermarket access	48.85153343
Tree canopy	97.53625048
Housing	—
Homeownership	38.16245348
Housing habitability	24.49634287
Low-inc homeowner severe housing cost burden	31.84909534
Low-inc renter severe housing cost burden	11.22802515
Uncrowded housing	96.93314513
Health Outcomes	—
Insured adults	43.11561658
Arthritis	0.0
Asthma ER Admissions	18.1
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	6.0
Cognitively Disabled	3.6
Physically Disabled	2.0
Heart Attack ER Admissions	20.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6

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	77.4
SLR Inundation Area	0.0
Children	55.0
Elderly	2.9
English Speaking	74.3
Foreign-born	6.2
Outdoor Workers	58.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.0
Traffic Density	27.0
Traffic Access	0.0
Other Indices	—
Hardship	57.8
Other Decision Support	—
2016 Voting	65.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	57.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Information provided to Rincon.