Appendix F

GHG Technical Modeling



DouglasKim+Associates,LLC

GREENHOUSE GAS EMISSIONS



DouglasKim+Associates,LLC

EXISTING EMISSIONS

Camp Alonim (Existing) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Camp Alonim (Existing)
Operational Year	2024
Lead Agency	County of Ventura
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.2
Location	Brandeis, CA 93064, USA
County	Ventura
City	Unincorporated
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3519
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.26

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
Apartments Low Rise	7.00	Dwelling Unit	328	11,322	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.	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Unmit.	0.51	5,323	5,323	0.30	0.23	22.7	5,421
Daily, Winter (Max)	—	—	—	—	—	—	—
Unmit.	0.51	5,142	5,142	0.32	0.24	0.67	5,223
Average Daily (Max)	—	—	—	—	—	—	—
Unmit.	0.51	3,713	3,713	0.24	0.17	7.05	3,777
Annual (Max)	—	—	—	—	—	—	—
Unmit.	0.08	615	615	0.04	0.03	1.17	625

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Mobile	—	5,253	5,253	0.24	0.22	22.6	5,348
Area	0.00	1.06	1.06	< 0.005	< 0.005	—	1.07
Energy	—	67.0	67.0	0.01	< 0.005	—	67.2
Water	0.51	1.73	2.23	0.05	< 0.005	—	3.92
Waste	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	0.08	0.08
Total	0.51	5,323	5,323	0.30	0.23	22.7	5,421

Daily, Winter (Max)	—	—	—	—	—	—	—
Mobile	—	5,073	5,073	0.26	0.24	0.59	5,152
Area	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	—	67.0	67.0	0.01	< 0.005	—	67.2
Water	0.51	1.73	2.23	0.05	< 0.005	—	3.92
Waste	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	0.08	0.08
Total	0.51	5,142	5,142	0.32	0.24	0.67	5,223
Average Daily	—	—	—	—	—	—	—
Mobile	—	3,644	3,644	0.18	0.17	6.97	3,705
Area	0.00	0.52	0.52	< 0.005	< 0.005	—	0.53
Energy	—	67.0	67.0	0.01	< 0.005	—	67.2
Water	0.51	1.73	2.23	0.05	< 0.005	—	3.92
Waste	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	0.08	0.08
Total	0.51	3,713	3,713	0.24	0.17	7.05	3,777
Annual	—	—	—	—	—	—	—
Mobile	—	603	603	0.03	0.03	1.15	613
Area	0.00	0.09	0.09	< 0.005	< 0.005	—	0.09
Energy	—	11.1	11.1	< 0.005	< 0.005	—	11.1
Water	0.08	0.29	0.37	0.01	< 0.005	—	0.65
Waste	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	0.01	0.01
Total	0.08	615	615	0.04	0.03	1.17	625

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	26.2	26.2	< 0.005	< 0.005	—	26.4
Total	—	26.2	26.2	< 0.005	< 0.005	—	26.4
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	26.2	26.2	< 0.005	< 0.005	—	26.4
Total	—	26.2	26.2	< 0.005	< 0.005	—	26.4
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	4.34	4.34	< 0.005	< 0.005	—	4.36
Total	—	4.34	4.34	< 0.005	< 0.005	—	4.36

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	40.8	40.8	< 0.005	< 0.005	—	40.9
Total	—	40.8	40.8	< 0.005	< 0.005	—	40.9
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	40.8	40.8	< 0.005	< 0.005	—	40.9
Total	—	40.8	40.8	< 0.005	< 0.005	—	40.9
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	6.75	6.75	< 0.005	< 0.005	—	6.77

Total	—	6.75	6.75	< 0.005	< 0.005	—	6.77

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	—	—	—	—	—	—
Architectural Coatings	—	—	—	—	—	—	—
Landscape Equipment	—	1.06	1.06	< 0.005	< 0.005	—	1.07
Total	0.00	1.06	1.06	< 0.005	< 0.005	—	1.07
Daily, Winter (Max)	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	—	—	—	—	—	—
Architectural Coatings	—	—	—	—	—	—	—
Total	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	—	—	—	—	—	—
Architectural Coatings	—	—	—	—	—	—	—
Landscape Equipment	—	0.09	0.09	< 0.005	< 0.005	—	0.09
Total	0.00	0.09	0.09	< 0.005	< 0.005	—	0.09

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.51	1.73	2.23	0.05	< 0.005	—	3.92
Total	0.51	1.73	2.23	0.05	< 0.005	—	3.92
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.51	1.73	2.23	0.05	< 0.005	—	3.92
Total	0.51	1.73	2.23	0.05	< 0.005	—	3.92
Annual	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.29	0.37	0.01	< 0.005	—	0.65
Total	0.08	0.29	0.37	0.01	< 0.005	—	0.65

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	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)	—	—	—	—	—	—	—
Apartments Low Rise	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	—	—	—	—	—	—	—
Apartments Low Rise	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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	0.08	0.08
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	0.08	0.08
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	0.01	0.01

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	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	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	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	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	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	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

5.9. 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
Total all Land Uses	651	0.00	0.00	169,725	6,510	0.00	0.00	1,697,250

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	7
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
22927.05	7,642	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)
Apartments Low Rise	27,429	349	0.0330	0.0040	127,203

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	265,324	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	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
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	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

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	17.3	annual days of extreme heat
Extreme Precipitation	5.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	21.9	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	0	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	0	0	0	N/A
Wildfire	0	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	75.4

AQ-PM	43.9
AQ-DPM	4.01
Drinking Water	72.3
Lead Risk Housing	11.8
Pesticides	0.76
Toxic Releases	23.5
Traffic	11.4
Effect Indicators	—
CleanUp Sites	85.8
Groundwater	54.5
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	96.3
Solid Waste	91.0
Sensitive Population	—
Asthma	44.0
Cardio-vascular	52.6
Low Birth Weights	12.4
Socioeconomic Factor Indicators	—
Education	21.7
Housing	8.50
Linguistic	10.4
Poverty	20.8
Unemployment	30.9

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	94.08443475
Employed	69.52393173
Median HI	91.09457205
Education	—
Bachelor's or higher	71.83369691
High school enrollment	100
Preschool enrollment	81.0727576
Transportation	—
Auto Access	85.40998332
Active commuting	15.98870781
Social	—
2-parent households	86.68035416
Voting	75.91428205
Neighborhood	—
Alcohol availability	97.0101373
Park access	59.05299628
Retail density	16.6944694
Supermarket access	20.2232773
Tree canopy	68.98498653
Housing	—
Homeownership	76.19658668
Housing habitability	91.32554857
Low-inc homeowner severe housing cost burden	83.19004235
Low-inc renter severe housing cost burden	75.86295393
Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	84.28076479
Arthritis	84.5

Asthma ER Admissions	62.2
High Blood Pressure	65.9
Cancer (excluding skin)	42.8
Asthma	72.9
Coronary Heart Disease	88.8
Chronic Obstructive Pulmonary Disease	86.1
Diagnosed Diabetes	92.6
Life Expectancy at Birth	41.4
Cognitively Disabled	56.3
Physically Disabled	52.4
Heart Attack ER Admissions	24.4
Mental Health Not Good	79.6
Chronic Kidney Disease	90.3
Obesity	79.9
Pedestrian Injuries	19.6
Physical Health Not Good	89.8
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	8.9
Current Smoker	79.5
No Leisure Time for Physical Activity	87.6
Climate Change Exposures	—
Wildfire Risk	66.4
SLR Inundation Area	0.0
Children	65.5
Elderly	84.2
English Speaking	83.2
Foreign-born	25.6

Outdoor Workers	74.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.1
Traffic Density	19.9
Traffic Access	23.0
Other Indices	—
Hardship	8.5
Other Decision Support	—
2016 Voting	86.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	30.0
Healthy Places Index Score for Project Location (b)	89.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project plans



DouglasKim+Associates,LLC

FUTURE EMISSIONS

Camp Alonim (Future) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

3.2. Demolition (2026) - Mitigated

3.3. Site Preparation (2026) - Unmitigated

3.4. Site Preparation (2026) - Mitigated

3.5. Grading (2026) - Unmitigated

3.6. Grading (2026) - Mitigated

3.7. Building Construction (2027) - Unmitigated

3.8. Building Construction (2027) - Mitigated

3.9. Building Construction (2028) - Unmitigated

3.10. Building Construction (2028) - Mitigated

3.11. Paving (2027) - Unmitigated

3.12. Paving (2027) - Mitigated

3.13. Architectural Coating (2028) - Unmitigated

3.14. Architectural Coating (2028) - Mitigated

3.15. Trenching (2026) - Unmitigated

3.16. Trenching (2026) - Mitigated

3.17. Trenching (2027) - Unmitigated

3.18. Trenching (2027) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Camp Alonim (Future)
Construction Start Date	6/2/2025
Operational Year	2027
Lead Agency	County of Ventura
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.2
Location	Brandeis, CA 93064, USA
County	Ventura
City	Unincorporated
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3519
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	26.4	Dwelling Unit	200	26,413	0.00	—	0.00	—

Movie Theater (No Matinee)	6.77	1000sqft	128	6,768	0.00	—	—	—
Parking Lot	2.61	1000sqft	0.06	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	CO2e
Daily, Summer (Max)	—
Unmit.	—
Mit.	6,887
% Reduced	—
Daily, Winter (Max)	—
Unmit.	—
Mit.	2,980
% Reduced	—
Average Daily (Max)	—
Unmit.	—
Mit.	1,653
% Reduced	—
Annual (Max)	—
Unmit.	—
Mit.	274

% Reduced	—

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	CO2e
Daily - Summer (Max)	—
Daily - Winter (Max)	—
Average Daily	—
Annual	—

2.3. Construction Emissions by Year, Mitigated

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

Year	CO2e
Daily - Summer (Max)	—
2026	6,887
2027	4,526
Daily - Winter (Max)	—
2026	240
2027	2,800
2028	2,980
Average Daily	—
2026	1,412
2027	1,653
2028	519
Annual	—
2026	234
2027	274
2028	85.9

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.	CO2e
Daily, Summer (Max)	—
Unmit.	—
Daily, Winter (Max)	—
Unmit.	—
Average Daily (Max)	—
Unmit.	—
Annual (Max)	—
Unmit.	—

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	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Average Daily	—
Total	—
Annual	—
Total	—

2.6. Operations Emissions by Sector, Mitigated

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

Sector	CO2e

Daily, Summer (Max)	—
Mobile	9,325
Area	5.24
Energy	408
Water	54.7
Waste	72.7
Refrig.	0.23
Total	9,865
Daily, Winter (Max)	—
Mobile	8,991
Area	0.00
Energy	408
Water	54.7
Waste	72.7
Refrig.	0.23
Total	9,526
Average Daily	—
Mobile	6,464
Area	2.58
Energy	408
Water	54.7
Waste	72.7
Refrig.	0.23
Total	7,002
Annual	—
Mobile	1,070
Area	0.43
Energy	67.5

Water	9.06
Waste	12.0
Refrig.	0.04
Total	1,159

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—

3.2. Demolition (2026) - Mitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Off-Road Equipment	3,438
Demolition	—

Onsite truck	0.00
Daily, Winter (Max)	—
Average Daily	—
Off-Road Equipment	198
Demolition	—
Onsite truck	0.00
Annual	—
Off-Road Equipment	32.8
Demolition	—
Onsite truck	0.00
Offsite	—
Daily, Summer (Max)	—
Worker	199
Vendor	0.00
Hauling	10.2
Daily, Winter (Max)	—
Average Daily	—
Worker	11.0
Vendor	0.00
Hauling	0.59
Annual	—
Worker	1.83
Vendor	0.00
Hauling	0.10

3.3. Site Preparation (2026) - Unmitigated

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

Location	CO2e

Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—

3.4. Site Preparation (2026) - Mitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Off-Road Equipment	5,316
Dust From Material Movement	—
Onsite truck	0.00
Daily, Winter (Max)	—
Average Daily	—
Off-Road Equipment	335
Dust From Material Movement	—
Onsite truck	0.00
Annual	—
Off-Road Equipment	55.5
Dust From Material Movement	—
Onsite truck	0.00

Offsite	—
Daily, Summer (Max)	—
Worker	233
Vendor	0.00
Hauling	0.00
Daily, Winter (Max)	—
Average Daily	—
Worker	14.1
Vendor	0.00
Hauling	0.00
Annual	—
Worker	2.34
Vendor	0.00
Hauling	0.00

3.5. Grading (2026) - Unmitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—

3.6. Grading (2026) - Mitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Off-Road Equipment	6,621
Dust From Material Movement	—
Onsite truck	0.00
Daily, Winter (Max)	—
Average Daily	—
Off-Road Equipment	780
Dust From Material Movement	—
Onsite truck	0.00
Annual	—
Off-Road Equipment	129
Dust From Material Movement	—
Onsite truck	0.00
Offsite	—
Daily, Summer (Max)	—
Worker	266
Vendor	0.00
Hauling	0.00
Daily, Winter (Max)	—
Average Daily	—
Worker	30.1
Vendor	0.00
Hauling	0.00
Annual	—

Worker	4.99
Vendor	0.00
Hauling	0.00

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	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—

3.8. Building Construction (2027) - Mitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Off-Road Equipment	2,405
Onsite truck	0.00
Daily, Winter (Max)	—
Off-Road Equipment	2,405
Onsite truck	0.00

Average Daily	—
Off-Road Equipment	1,294
Onsite truck	0.00
Annual	—
Off-Road Equipment	214
Onsite truck	0.00
Offsite	—
Daily, Summer (Max)	—
Worker	286
Vendor	122
Hauling	0.00
Daily, Winter (Max)	—
Worker	272
Vendor	122
Hauling	0.00
Average Daily	—
Worker	148
Vendor	65.8
Hauling	0.00
Annual	—
Worker	24.5
Vendor	10.9
Hauling	0.00

3.9. Building Construction (2028) - Unmitigated

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

Location	CO2e
Onsite	—

Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—

3.10. Building Construction (2028) - Mitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Off-Road Equipment	2,406
Onsite truck	0.00
Average Daily	—
Off-Road Equipment	428
Onsite truck	0.00
Annual	—
Off-Road Equipment	70.9
Onsite truck	0.00
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Worker	268

Vendor	119
Hauling	0.00
Average Daily	—
Worker	48.0
Vendor	21.2
Hauling	0.00
Annual	—
Worker	7.95
Vendor	3.51
Hauling	0.00

3.11. Paving (2027) - Unmitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—

3.12. Paving (2027) - Mitigated

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

Location	CO2e

Onsite	—
Daily, Summer (Max)	—
Off-Road Equipment	1,516
Paving	—
Onsite truck	0.00
Daily, Winter (Max)	—
Average Daily	—
Off-Road Equipment	91.4
Paving	—
Onsite truck	0.00
Annual	—
Off-Road Equipment	15.1
Paving	—
Onsite truck	0.00
Offsite	—
Daily, Summer (Max)	—
Worker	196
Vendor	0.00
Hauling	0.00
Daily, Winter (Max)	—
Average Daily	—
Worker	11.4
Vendor	0.00
Hauling	0.00
Annual	—
Worker	1.88
Vendor	0.00
Hauling	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	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—

3.14. Architectural Coating (2028) - Mitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Off-Road Equipment	134
Architectural Coatings	—
Onsite truck	0.00
Average Daily	—
Off-Road Equipment	15.0
Architectural Coatings	—
Onsite truck	0.00

Annual	—
Off-Road Equipment	2.49
Architectural Coatings	—
Onsite truck	0.00
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Worker	53.5
Vendor	0.00
Hauling	0.00
Average Daily	—
Worker	6.06
Vendor	0.00
Hauling	0.00
Annual	—
Worker	1.00
Vendor	0.00
Hauling	0.00

3.15. Trenching (2026) - Unmitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—
Offsite	—

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

3.16. Trenching (2026) - Mitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Off-Road Equipment	208
Onsite truck	0.00
Average Daily	—
Off-Road Equipment	37.5
Onsite truck	0.00
Annual	—
Off-Road Equipment	6.20
Onsite truck	0.00
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Worker	31.7
Vendor	0.00
Hauling	0.00
Average Daily	—
Worker	5.76
Vendor	0.00

Hauling	0.00
Annual	—
Worker	0.95
Vendor	0.00
Hauling	0.00

3.17. Trenching (2027) - Unmitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Average Daily	—
Annual	—

3.18. Trenching (2027) - Mitigated

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

Location	CO2e
Onsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Off-Road Equipment	208
Onsite truck	0.00

Average Daily	—
Off-Road Equipment	36.7
Onsite truck	0.00
Annual	—
Off-Road Equipment	6.07
Onsite truck	0.00
Offsite	—
Daily, Summer (Max)	—
Daily, Winter (Max)	—
Worker	31.2
Vendor	0.00
Hauling	0.00
Average Daily	—
Worker	5.53
Vendor	0.00
Hauling	0.00
Annual	—
Worker	0.92
Vendor	0.00
Hauling	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

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	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	CO2e
Daily, Summer (Max)	—
Apartments Low Rise	98.7
Movie Theater (No Matinee)	60.0
Parking Lot	2.18
Total	161
Daily, Winter (Max)	—
Apartments Low Rise	98.7
Movie Theater (No Matinee)	60.0
Parking Lot	2.18
Total	161
Annual	—
Apartments Low Rise	16.3

Movie Theater (No Matinee)	9.94
Parking Lot	0.36
Total	26.6

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	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	CO2e
Daily, Summer (Max)	—
Apartments Low Rise	154
Movie Theater (No Matinee)	92.8
Parking Lot	0.00
Total	247
Daily, Winter (Max)	—
Apartments Low Rise	154
Movie Theater (No Matinee)	92.8
Parking Lot	0.00
Total	247
Annual	—

Apartments Low Rise	25.5
Movie Theater (No Matinee)	15.4
Parking Lot	0.00
Total	40.9

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	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.3.2. Mitigated

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

Source	CO2e
Daily, Summer (Max)	—
Hearths	0.00
Consumer Products	—
Architectural Coatings	—
Landscape Equipment	5.24
Total	5.24
Daily, Winter (Max)	—
Hearths	0.00

Consumer Products	—
Architectural Coatings	—
Total	0.00
Annual	—
Hearths	0.00
Consumer Products	—
Architectural Coatings	—
Landscape Equipment	0.43
Total	0.43

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	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.4.2. Mitigated

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

Land Use	CO2e
Daily, Summer (Max)	—
Apartments Low Rise	14.7
Movie Theater (No Matinee)	40.0

Parking Lot	0.00
Total	54.7
Daily, Winter (Max)	—
Apartments Low Rise	14.7
Movie Theater (No Matinee)	40.0
Parking Lot	0.00
Total	54.7
Annual	—
Apartments Low Rise	2.44
Movie Theater (No Matinee)	6.62
Parking Lot	0.00
Total	9.06

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	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.5.2. Mitigated

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

Land Use	CO2e

Daily, Summer (Max)	—
Apartments Low Rise	0.00
Movie Theater (No Matinee)	72.7
Parking Lot	0.00
Total	72.7
Daily, Winter (Max)	—
Apartments Low Rise	0.00
Movie Theater (No Matinee)	72.7
Parking Lot	0.00
Total	72.7
Annual	—
Apartments Low Rise	0.00
Movie Theater (No Matinee)	12.0
Parking Lot	0.00
Total	12.0

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	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.6.2. Mitigated

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

Land Use	CO2e
Daily, Summer (Max)	—
Apartments Low Rise	0.19
Movie Theater (No Matinee)	0.04
Total	0.23
Daily, Winter (Max)	—
Apartments Low Rise	0.19
Movie Theater (No Matinee)	0.04
Total	0.23
Annual	—
Apartments Low Rise	0.03
Movie Theater (No Matinee)	0.01
Total	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)

Equipment Type	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.7.2. Mitigated

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

Equipment Type	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	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.8.2. Mitigated

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

Equipment Type	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	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.9.2. Mitigated

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

Equipment Type	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	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	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	CO2e
Daily, Summer (Max)	—
Avoided	—
Subtotal	—
Sequestered	—

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—

Annual	—
Total	—

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

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

Land Use	CO2e
Daily, Summer (Max)	—
Total	—
Daily, Winter (Max)	—
Total	—
Annual	—
Total	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	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	6/2/2026	6/30/2026	5.00	21.0	—
Site Preparation	Site Preparation	7/1/2026	7/31/2026	5.00	23.0	—
Grading	Grading	8/1/2026	9/30/2026	5.00	43.0	—
Building Construction	Building Construction	4/1/2027	3/31/2028	5.00	262	—
Paving	Paving	4/1/2027	4/30/2027	5.00	22.0	—
Architectural Coating	Architectural Coating	1/2/2028	2/28/2028	5.00	41.0	—
Trenching	Trenching	10/1/2026	3/31/2027	5.00	130	—

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	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40

Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Trenching	Trenchers	Diesel	Tier 4 Final	1.00	8.00	40.0	0.50

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	15.0	18.5	LDA,LDT1,LDT2

Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	0.14	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	21.9	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	3.93	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.37	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

Trenching	—	—	—	—
Trenching	Worker	2.50	18.5	LDA,LDT1,LDT2
Trenching	Vendor	—	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	0.14	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	21.9	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	3.93	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.37	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	2.50	18.5	LDA,LDT1,LDT2
Trenching	Vendor	—	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	53,486	17,829	10,152	3,384	157

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	10.0	—
Site Preparation	—	—	34.5	0.00	—
Grading	—	—	129	0.00	—
Paving	0.00	0.00	0.00	0.00	0.06

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%
Movie Theater (No Matinee)	0.00	0%
Parking Lot	0.06	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	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	1,214	0.00	0.00	316,507	12,140	0.00	0.00	3,165,071

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	1,214	0.00	0.00	316,507	12,140	0.00	0.00	3,165,071

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	26
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)

Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	26
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
53486.325	17,829	10,152	3,384	157

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	103,496	346	0.0330	0.0040	479,972
Movie Theater (No Matinee)	62,935	346	0.0330	0.0040	288,653
Parking Lot	2,289	346	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	103,496	346	0.0330	0.0040	479,972
Movie Theater (No Matinee)	62,935	346	0.0330	0.0040	288,653
Parking Lot	2,289	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	1,001,143	0.00
Movie Theater (No Matinee)	2,718,039	0.00
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	1,001,143	0.00
Movie Theater (No Matinee)	2,718,039	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	0.00	—
Movie Theater (No Matinee)	38.6	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	0.00	—
Movie Theater (No Matinee)	38.6	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Movie Theater (No Matinee)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Movie Theater (No Matinee)	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Movie Theater (No Matinee)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Movie Theater (No Matinee)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Movie Theater (No Matinee)	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Movie Theater (No Matinee)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	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

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.3	annual days of extreme heat
Extreme Precipitation	5.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	21.9	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	2	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	2	1	1	3
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	75.4
AQ-PM	43.9
AQ-DPM	4.01
Drinking Water	72.3
Lead Risk Housing	11.8
Pesticides	0.76
Toxic Releases	23.5
Traffic	11.4
Effect Indicators	—
CleanUp Sites	85.8
Groundwater	54.5
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	96.3
Solid Waste	91.0
Sensitive Population	—
Asthma	44.0
Cardio-vascular	52.6
Low Birth Weights	12.4
Socioeconomic Factor Indicators	—
Education	21.7
Housing	8.50
Linguistic	10.4
Poverty	20.8
Unemployment	30.9

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.08443475
Employed	69.52393173
Median HI	91.09457205
Education	—
Bachelor's or higher	71.83369691
High school enrollment	100
Preschool enrollment	81.0727576
Transportation	—
Auto Access	85.40998332
Active commuting	15.98870781
Social	—
2-parent households	86.68035416
Voting	75.91428205
Neighborhood	—
Alcohol availability	97.0101373
Park access	59.05299628
Retail density	16.6944694
Supermarket access	20.2232773
Tree canopy	68.98498653
Housing	—
Homeownership	76.19658668
Housing habitability	91.32554857
Low-inc homeowner severe housing cost burden	83.19004235
Low-inc renter severe housing cost burden	75.86295393

Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	84.28076479
Arthritis	84.5
Asthma ER Admissions	62.2
High Blood Pressure	65.9
Cancer (excluding skin)	42.8
Asthma	72.9
Coronary Heart Disease	88.8
Chronic Obstructive Pulmonary Disease	86.1
Diagnosed Diabetes	92.6
Life Expectancy at Birth	41.4
Cognitively Disabled	56.3
Physically Disabled	52.4
Heart Attack ER Admissions	24.4
Mental Health Not Good	79.6
Chronic Kidney Disease	90.3
Obesity	79.9
Pedestrian Injuries	19.6
Physical Health Not Good	89.8
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	8.9
Current Smoker	79.5
No Leisure Time for Physical Activity	87.6
Climate Change Exposures	—
Wildfire Risk	66.4
SLR Inundation Area	0.0

Children	65.5
Elderly	84.2
English Speaking	83.2
Foreign-born	25.6
Outdoor Workers	74.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.1
Traffic Density	19.9
Traffic Access	23.0
Other Indices	—
Hardship	8.5
Other Decision Support	—
2016 Voting	86.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	30.0
Healthy Places Index Score for Project Location (b)	89.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project plans.
Construction: Construction Phases	Developer information
Construction: Off-Road Equipment	—