LSWWTP and Buccaneer Lift Station and Force Main Summary 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

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

7. Health and Equity Details

7.3. Overall Health & Equity Scores

7.5. Evaluation Scorecard

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	LSWWTP and Buccaneer Lift Station and Force Main
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	21.8
Location	33.17922542455979, -117.36989422855787
County	San Diego
City	Oceanside
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6230
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.22

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
Other Non-Asphalt Surfaces	18.0	Acre	18.0	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.10	48.0	58.0	0.14	1.94	10.1	12.1	1.79	3.81	5.59	—	15,521	15,521	0.63	0.14	15,581
Mit.	6.10	48.0	58.0	0.14	1.94	4.21	6.16	1.79	1.55	3.33	—	15,521	15,521	0.63	0.14	15,581
% Reduced	—	—	—	—	—	58%	49%	—	59%	40%	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.09	48.0	57.7	0.14	1.94	10.1	12.1	1.79	3.81	5.59	—	15,486	15,486	0.64	0.14	15,546
Mit.	6.09	48.0	57.7	0.14	1.94	4.21	6.16	1.79	1.55	3.33	—	15,486	15,486	0.64	0.14	15,546
% Reduced	—	—	—	—	—	58%	49%	—	59%	40%	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.08	34.3	37.2	0.08	1.39	7.22	8.60	1.28	2.72	3.99	—	9,041	9,041	0.37	0.08	9,076
Mit.	4.08	34.3	37.2	0.08	1.39	3.01	4.39	1.28	1.11	2.38	—	9,041	9,041	0.37	0.08	9,076

% Reduced	—	—	—	—	—	58%	49%	—	59%	40%	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	6.26	6.80	0.01	0.25	1.32	1.57	0.23	0.50	0.73	—	1,497	1,497	0.06	0.01	1,503
Mit.	0.75	6.26	6.80	0.01	0.25	0.55	0.80	0.23	0.20	0.43	—	1,497	1,497	0.06	0.01	1,503
% Reduced	—	—	—	—	—	58%	49%	—	59%	40%	—	—	—	—	—	—

6. Climate Risk Detailed Report

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	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores 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	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	21.0
Healthy Places Index Score for Project Location (b)	47.0
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.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

LSWWTP and Buccaneer Lift Station and Force Main Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

3. Construction Emissions Details

3.1. Phase 1 (2025) - Unmitigated

3.2. Phase 1 (2025) - Mitigated

3.3. Phase 1 (2026) - Unmitigated

3.4. Phase 1 (2026) - Mitigated

3.5. Phase 2 (2027) - Unmitigated

3.6. Phase 2 (2027) - Mitigated

3.7. Phase 3 (2027) - Unmitigated

3.8. Phase 3 (2027) - Mitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

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	LSWWTP and Buccaneer Lift Station and Force Main
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	21.8
Location	33.17922542455979, -117.36989422855787
County	San Diego
City	Oceanside
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6230
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.22

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
Other Non-Asphalt Surfaces	18.0	Acre	18.0	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.10	48.0	58.0	0.14	1.94	10.1	12.1	1.79	3.81	5.59	—	15,521	15,521	0.63	0.14	15,581
Mit.	6.10	48.0	58.0	0.14	1.94	4.21	6.16	1.79	1.55	3.33	—	15,521	15,521	0.63	0.14	15,581
% Reduced	—	—	—	—	—	58%	49%	—	59%	40%	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.09	48.0	57.7	0.14	1.94	10.1	12.1	1.79	3.81	5.59	—	15,486	15,486	0.64	0.14	15,546
Mit.	6.09	48.0	57.7	0.14	1.94	4.21	6.16	1.79	1.55	3.33	—	15,486	15,486	0.64	0.14	15,546
% Reduced	—	—	—	—	—	58%	49%	—	59%	40%	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.08	34.3	37.2	0.08	1.39	7.22	8.60	1.28	2.72	3.99	—	9,041	9,041	0.37	0.08	9,076
Mit.	4.08	34.3	37.2	0.08	1.39	3.01	4.39	1.28	1.11	2.38	—	9,041	9,041	0.37	0.08	9,076

% Reduced	—	—	—	—	—	58%	49%	—	59%	40%	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	6.26	6.80	0.01	0.25	1.32	1.57	0.23	0.50	0.73	—	1,497	1,497	0.06	0.01	1,503
Mit.	0.75	6.26	6.80	0.01	0.25	0.55	0.80	0.23	0.20	0.43	—	1,497	1,497	0.06	0.01	1,503
% Reduced	—	—	—	—	—	58%	49%	—	59%	40%	—	—	—	—	—	—

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	5.72	48.0	52.4	0.11	1.94	10.1	12.1	1.79	3.81	5.59	—	12,681	12,681	0.52	0.12	12,731
2026	5.47	44.5	51.5	0.11	1.75	10.1	11.9	1.61	3.81	5.42	—	12,674	12,674	0.52	0.12	12,724
2027	6.10	45.8	58.0	0.14	1.75	8.96	10.7	1.61	3.37	4.97	—	15,521	15,521	0.63	0.14	15,581
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	5.72	48.0	52.1	0.11	1.94	10.1	12.1	1.79	3.81	5.59	—	12,654	12,654	0.52	0.12	12,702
2026	5.47	44.6	51.2	0.11	1.75	10.1	11.9	1.61	3.81	5.42	—	12,647	12,647	0.52	0.12	12,695
2027	6.09	45.8	57.7	0.14	1.75	8.96	10.7	1.61	3.37	4.97	—	15,486	15,486	0.64	0.14	15,546
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.08	34.3	37.2	0.08	1.39	7.22	8.60	1.28	2.72	3.99	—	9,041	9,041	0.37	0.08	9,076
2026	3.90	31.8	36.6	0.08	1.25	7.22	8.47	1.15	2.72	3.87	—	9,037	9,037	0.37	0.08	9,071
2027	2.36	17.7	22.6	0.05	0.67	3.19	3.86	0.62	1.20	1.81	—	6,032	6,032	0.25	0.06	6,055
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	0.75	6.26	6.80	0.01	0.25	1.32	1.57	0.23	0.50	0.73	—	1,497	1,497	0.06	0.01	1,503
2026	0.71	5.81	6.68	0.01	0.23	1.32	1.55	0.21	0.50	0.71	—	1,496	1,496	0.06	0.01	1,502
2027	0.43	3.23	4.12	0.01	0.12	0.58	0.70	0.11	0.22	0.33	—	999	999	0.04	0.01	1,002

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	5.72	48.0	52.4	0.11	1.94	4.21	6.16	1.79	1.55	3.33	—	12,681	12,681	0.52	0.12	12,731
2026	5.47	44.5	51.5	0.11	1.75	4.21	5.96	1.61	1.55	3.16	—	12,674	12,674	0.52	0.12	12,724
2027	6.10	45.8	58.0	0.14	1.75	3.84	5.59	1.61	1.39	3.00	—	15,521	15,521	0.63	0.14	15,581
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	5.72	48.0	52.1	0.11	1.94	4.21	6.16	1.79	1.55	3.33	—	12,654	12,654	0.52	0.12	12,702
2026	5.47	44.6	51.2	0.11	1.75	4.21	5.96	1.61	1.55	3.16	—	12,647	12,647	0.52	0.12	12,695
2027	6.09	45.8	57.7	0.14	1.75	3.84	5.59	1.61	1.39	3.00	—	15,486	15,486	0.64	0.14	15,546
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.08	34.3	37.2	0.08	1.39	3.01	4.39	1.28	1.11	2.38	—	9,041	9,041	0.37	0.08	9,076
2026	3.90	31.8	36.6	0.08	1.25	3.01	4.26	1.15	1.11	2.26	—	9,037	9,037	0.37	0.08	9,071
2027	2.36	17.7	22.6	0.05	0.67	1.38	2.05	0.62	0.50	1.12	—	6,032	6,032	0.25	0.06	6,055
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.75	6.26	6.80	0.01	0.25	0.55	0.80	0.23	0.20	0.43	—	1,497	1,497	0.06	0.01	1,503
2026	0.71	5.81	6.68	0.01	0.23	0.55	0.78	0.21	0.20	0.41	—	1,496	1,496	0.06	0.01	1,502
2027	0.43	3.23	4.12	0.01	0.12	0.25	0.37	0.11	0.09	0.20	—	999	999	0.04	0.01	1,002

3. Construction Emissions Details

3.1. Phase 1 (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.51	47.8	50.0	0.11	1.94	—	1.94	1.79	—	1.79	—	12,183	12,183	0.49	0.10	12,225
Dust From Material Movement	—	—	—	—	—	9.67	9.67	—	3.70	3.70	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.51	47.8	50.0	0.11	1.94	—	1.94	1.79	—	1.79	—	12,183	12,183	0.49	0.10	12,225
Dust From Material Movement	—	—	—	—	—	9.67	9.67	—	3.70	3.70	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	34.2	35.7	0.08	1.39	—	1.39	1.28	—	1.28	—	8,702	8,702	0.35	0.07	8,732
Dust From Material Movement	—	—	—	—	—	6.91	6.91	—	2.65	2.65	—	—	—	—	—	—

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	6.24	6.52	0.01	0.25	—	0.25	0.23	—	0.23	—	1,441	1,441	0.06	0.01	1,446
Dust From Material Movement	—	—	—	—	—	1.26	1.26	—	0.48	0.48	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.16	2.43	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	498	498	0.02	0.02	506
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	2.13	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	470	470	0.03	0.02	477
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	1.54	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	339	339	0.02	0.01	344
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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.28	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.1	56.1	< 0.005	< 0.005	56.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.2. Phase 1 (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.51	47.8	50.0	0.11	1.94	—	1.94	1.79	—	1.79	—	12,183	12,183	0.49	0.10	12,225
Dust From Material Movement	—	—	—	—	—	3.77	3.77	—	1.44	1.44	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.51	47.8	50.0	0.11	1.94	—	1.94	1.79	—	1.79	—	12,183	12,183	0.49	0.10	12,225
Dust From Material Movement	—	—	—	—	—	3.77	3.77	—	1.44	1.44	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	34.2	35.7	0.08	1.39	—	1.39	1.28	—	1.28	—	8,702	8,702	0.35	0.07	8,732
Dust From Material Movement	—	—	—	—	—	2.69	2.69	—	1.03	1.03	—	—	—	—	—	—

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	6.24	6.52	0.01	0.25	—	0.25	0.23	—	0.23	—	1,441	1,441	0.06	0.01	1,446
Dust From Material Movement	—	—	—	—	—	0.49	0.49	—	0.19	0.19	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.16	2.43	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	498	498	0.02	0.02	506
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	2.13	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	470	470	0.03	0.02	477
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	1.54	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	339	339	0.02	0.01	344
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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.28	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.1	56.1	< 0.005	< 0.005	56.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.3. Phase 1 (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.28	44.4	49.2	0.11	1.75	—	1.75	1.61	—	1.61	—	12,186	12,186	0.49	0.10	12,228
Dust From Material Movement	—	—	—	—	—	9.67	9.67	—	3.70	3.70	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.28	44.4	49.2	0.11	1.75	—	1.75	1.61	—	1.61	—	12,186	12,186	0.49	0.10	12,228
Dust From Material Movement	—	—	—	—	—	9.67	9.67	—	3.70	3.70	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.77	31.7	35.2	0.08	1.25	—	1.25	1.15	—	1.15	—	8,705	8,705	0.35	0.07	8,734
Dust From Material Movement	—	—	—	—	—	6.91	6.91	—	2.65	2.65	—	—	—	—	—	—

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	5.79	6.42	0.01	0.23	—	0.23	0.21	—	0.21	—	1,441	1,441	0.06	0.01	1,446
Dust From Material Movement	—	—	—	—	—	1.26	1.26	—	0.48	0.48	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.15	2.27	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	488	488	0.02	0.02	495
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.16	2.00	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	461	461	0.02	0.02	467
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	1.44	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	332	332	0.02	0.01	337
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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.0	55.0	< 0.005	< 0.005	55.8
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

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.4. Phase 1 (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.28	44.4	49.2	0.11	1.75	—	1.75	1.61	—	1.61	—	12,186	12,186	0.49	0.10	12,228
Dust From Material Movement	—	—	—	—	—	3.77	3.77	—	1.44	1.44	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.28	44.4	49.2	0.11	1.75	—	1.75	1.61	—	1.61	—	12,186	12,186	0.49	0.10	12,228
Dust From Material Movement	—	—	—	—	—	3.77	3.77	—	1.44	1.44	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.77	31.7	35.2	0.08	1.25	—	1.25	1.15	—	1.15	—	8,705	8,705	0.35	0.07	8,734
Dust From Material Movement	—	—	—	—	—	2.69	2.69	—	1.03	1.03	—	—	—	—	—	—

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	5.79	6.42	0.01	0.23	—	0.23	0.21	—	0.21	—	1,441	1,441	0.06	0.01	1,446
Dust From Material Movement	—	—	—	—	—	0.49	0.49	—	0.19	0.19	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.15	2.27	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	488	488	0.02	0.02	495
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.16	2.00	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	461	461	0.02	0.02	467
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	1.44	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	332	332	0.02	0.01	337
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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.0	55.0	< 0.005	< 0.005	55.8
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

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.5. Phase 2 (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.24	33.5	38.1	0.10	1.30	—	1.30	1.20	—	1.20	—	10,528	10,528	0.43	0.09	10,564
Dust From Material Movement	—	—	—	—	—	8.38	8.38	—	3.23	3.23	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.24	33.5	38.1	0.10	1.30	—	1.30	1.20	—	1.20	—	10,528	10,528	0.43	0.09	10,564
Dust From Material Movement	—	—	—	—	—	8.38	8.38	—	3.23	3.23	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	11.8	13.5	0.03	0.46	—	0.46	0.42	—	0.42	—	3,721	3,721	0.15	0.03	3,734
Dust From Material Movement	—	—	—	—	—	2.96	2.96	—	1.14	1.14	—	—	—	—	—	—

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	2.16	2.46	0.01	0.08	—	0.08	0.08	—	0.08	—	616	616	0.02	< 0.005	618
Dust From Material Movement	—	—	—	—	—	0.54	0.54	—	0.21	0.21	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.10	1.64	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	366	366	0.02	0.01	371
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	1.44	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	345	345	0.02	0.01	350
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.52	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	0.01	< 0.005	125
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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.4	20.4	< 0.005	< 0.005	20.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.6. Phase 2 (2027) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.24	33.5	38.1	0.10	1.30	—	1.30	1.20	—	1.20	—	10,528	10,528	0.43	0.09	10,564
Dust From Material Movement	—	—	—	—	—	3.27	3.27	—	1.26	1.26	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.24	33.5	38.1	0.10	1.30	—	1.30	1.20	—	1.20	—	10,528	10,528	0.43	0.09	10,564
Dust From Material Movement	—	—	—	—	—	3.27	3.27	—	1.26	1.26	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	11.8	13.5	0.03	0.46	—	0.46	0.42	—	0.42	—	3,721	3,721	0.15	0.03	3,734
Dust From Material Movement	—	—	—	—	—	1.16	1.16	—	0.45	0.45	—	—	—	—	—	—

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	2.16	2.46	0.01	0.08	—	0.08	0.08	—	0.08	—	616	616	0.02	< 0.005	618
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	0.08	0.08	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.10	1.64	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	366	366	0.02	0.01	371
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	1.44	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	345	345	0.02	0.01	350
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.52	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	0.01	< 0.005	125
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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.4	20.4	< 0.005	< 0.005	20.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. Phase 3 (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.61	12.1	17.1	0.04	0.44	—	0.44	0.41	—	0.41	—	4,376	4,376	0.18	0.04	4,391
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.61	12.1	17.1	0.04	0.44	—	0.44	0.41	—	0.41	—	4,376	4,376	0.18	0.04	4,391
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	5.76	8.10	0.02	0.21	—	0.21	0.19	—	0.19	—	2,074	2,074	0.08	0.02	2,081
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.05	1.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	343	343	0.01	< 0.005	345

Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.07	1.13	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	251	251	0.01	0.01	255
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.99	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	237	237	0.01	0.01	241
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.47	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	113	113	0.01	< 0.005	115
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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	19.1
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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.8. Phase 3 (2027) - Mitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.61	12.1	17.1	0.04	0.44	—	0.44	0.41	—	0.41	—	4,376	4,376	0.18	0.04	4,391
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.61	12.1	17.1	0.04	0.44	—	0.44	0.41	—	0.41	—	4,376	4,376	0.18	0.04	4,391
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	5.76	8.10	0.02	0.21	—	0.21	0.19	—	0.19	—	2,074	2,074	0.08	0.02	2,081
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.05	1.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	343	343	0.01	< 0.005	345
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.07	1.13	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	251	251	0.01	0.01	255
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.99	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	237	237	0.01	0.01	241
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.47	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	113	113	0.01	< 0.005	115
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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	19.1
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
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

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Phase 1	Grading	1/1/2025	12/31/2026	5.00	522	—
Phase 2	Grading	1/1/2027	6/30/2027	5.00	129	—
Phase 3	Paving	1/1/2027	8/31/2027	5.00	173	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Phase 1	Cranes	Diesel	Average	1.00	2.00	367	0.29
Phase 1	Crawler Tractors	Diesel	Average	1.00	7.00	87.0	0.43
Phase 1	Excavators	Diesel	Average	4.00	7.00	36.0	0.38
Phase 1	Generator Sets	Diesel	Average	1.00	7.00	84.0	0.74
Phase 1	Off-Highway Trucks	Diesel	Average	4.00	5.00	376	0.38
Phase 1	Tractors/Loaders/Backhoes	Diesel	Average	6.00	7.00	84.0	0.37
Phase 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Phase 1	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Phase 1	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Phase 2	Cranes	Diesel	Average	1.00	2.00	367	0.29
Phase 2	Excavators	Diesel	Average	2.00	7.00	36.0	0.38

Phase 2	Off-Highway Trucks	Diesel	Average	4.00	5.00	376	0.38
Phase 2	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Phase 2	Tractors/Loaders/Backhoes	Diesel	Average	4.00	7.00	84.0	0.37
Phase 2	Concrete/Industrial Saws	Diesel	Average	1.00	4.00	33.0	0.73
Phase 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Phase 2	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Phase 3	Cranes	Diesel	Average	1.00	2.00	367	0.29
Phase 3	Excavators	Diesel	Average	1.00	7.00	36.0	0.38
Phase 3	Off-Highway Trucks	Diesel	Average	3.00	5.00	376	0.38
Phase 3	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Phase 3	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Phase 3	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Phase 3	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Phase 1	Cranes	Diesel	Average	1.00	2.00	367	0.29
Phase 1	Crawler Tractors	Diesel	Average	1.00	7.00	87.0	0.43
Phase 1	Excavators	Diesel	Average	4.00	7.00	36.0	0.38
Phase 1	Generator Sets	Diesel	Average	1.00	7.00	84.0	0.74
Phase 1	Off-Highway Trucks	Diesel	Average	4.00	5.00	376	0.38
Phase 1	Tractors/Loaders/Backhoes	Diesel	Average	6.00	7.00	84.0	0.37
Phase 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Phase 1	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Phase 1	Scrapers	Diesel	Average	2.00	8.00	423	0.48

Phase 2	Cranes	Diesel	Average	1.00	2.00	367	0.29
Phase 2	Excavators	Diesel	Average	2.00	7.00	36.0	0.38
Phase 2	Off-Highway Trucks	Diesel	Average	4.00	5.00	376	0.38
Phase 2	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Phase 2	Tractors/Loaders/Backhoes	Diesel	Average	4.00	7.00	84.0	0.37
Phase 2	Concrete/Industrial Saws	Diesel	Average	1.00	4.00	33.0	0.73
Phase 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Phase 2	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Phase 3	Cranes	Diesel	Average	1.00	2.00	367	0.29
Phase 3	Excavators	Diesel	Average	1.00	7.00	36.0	0.38
Phase 3	Off-Highway Trucks	Diesel	Average	3.00	5.00	376	0.38
Phase 3	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Phase 3	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Phase 3	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Phase 3	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Phase 1	—	—	—	—
Phase 1	Worker	52.5	12.0	LDA,LDT1,LDT2
Phase 1	Vendor	—	7.63	HHDT,MHDT
Phase 1	Hauling	0.00	20.0	HHDT
Phase 1	Onsite truck	—	—	HHDT

Phase 2	—	—	—	—
Phase 2	Worker	40.0	12.0	LDA,LDT1,LDT2
Phase 2	Vendor	—	7.63	HHDT,MHDT
Phase 2	Hauling	0.00	20.0	HHDT
Phase 2	Onsite truck	—	—	HHDT
Phase 3	—	—	—	—
Phase 3	Worker	27.5	12.0	LDA,LDT1,LDT2
Phase 3	Vendor	—	7.63	HHDT,MHDT
Phase 3	Hauling	0.00	20.0	HHDT
Phase 3	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Phase 1	—	—	—	—
Phase 1	Worker	52.5	12.0	LDA,LDT1,LDT2
Phase 1	Vendor	—	7.63	HHDT,MHDT
Phase 1	Hauling	0.00	20.0	HHDT
Phase 1	Onsite truck	—	—	HHDT
Phase 2	—	—	—	—
Phase 2	Worker	40.0	12.0	LDA,LDT1,LDT2
Phase 2	Vendor	—	7.63	HHDT,MHDT
Phase 2	Hauling	0.00	20.0	HHDT
Phase 2	Onsite truck	—	—	HHDT
Phase 3	—	—	—	—
Phase 3	Worker	27.5	12.0	LDA,LDT1,LDT2
Phase 3	Vendor	—	7.63	HHDT,MHDT
Phase 3	Hauling	0.00	20.0	HHDT

Phase 3	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Phase 1	—	—	1,794	0.00	—
Phase 2	—	—	379	0.00	—
Phase 3	0.00	0.00	0.00	0.00	18.0

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	18.0	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	589	0.03	< 0.005
2026	0.00	589	0.03	< 0.005
2027	0.00	589	0.03	< 0.005

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	8.12	annual days of extreme heat
Extreme Precipitation	2.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores 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	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	29.9
AQ-PM	49.8
AQ-DPM	72.1
Drinking Water	70.4
Lead Risk Housing	12.1
Pesticides	0.00
Toxic Releases	15.0
Traffic	—
Effect Indicators	—
CleanUp Sites	86.2
Groundwater	89.6
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	91.9
Solid Waste	0.00
Sensitive Population	—
Asthma	29.8
Cardio-vascular	46.8
Low Birth Weights	12.1
Socioeconomic Factor Indicators	—
Education	4.67
Housing	43.9
Linguistic	2.81
Poverty	26.7

Unemployment	8.69

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	58.42422687
Employed	30.82253304
Median HI	39.72796099
Education	—
Bachelor's or higher	69.88322854
High school enrollment	100
Preschool enrollment	5.774412935
Transportation	—
Auto Access	35.49339151
Active commuting	67.45797511
Social	—
2-parent households	85.70511998
Voting	64.7760811
Neighborhood	—
Alcohol availability	19.96663673
Park access	52.67547799
Retail density	41.88374182
Supermarket access	38.88104709
Tree canopy	12.04927499
Housing	—
Homeownership	9.380213012

Housing habitability	36.55844989
Low-inc homeowner severe housing cost burden	26.6521237
Low-inc renter severe housing cost burden	71.07660721
Uncrowded housing	60.05389452
Health Outcomes	—
Insured adults	36.09649686
Arthritis	23.1
Asthma ER Admissions	43.4
High Blood Pressure	43.5
Cancer (excluding skin)	16.1
Asthma	61.7
Coronary Heart Disease	31.2
Chronic Obstructive Pulmonary Disease	40.0
Diagnosed Diabetes	70.5
Life Expectancy at Birth	21.0
Cognitively Disabled	54.2
Physically Disabled	50.9
Heart Attack ER Admissions	43.9
Mental Health Not Good	64.8
Chronic Kidney Disease	45.1
Obesity	60.5
Pedestrian Injuries	66.5
Physical Health Not Good	68.2
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	5.2
Current Smoker	60.5

No Leisure Time for Physical Activity	77.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	37.9
Children	36.4
Elderly	53.1
English Speaking	70.3
Foreign-born	9.1
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	8.4
Traffic Density	0.0
Traffic Access	55.5
Other Indices	—
Hardship	16.7
Other Decision Support	—
2016 Voting	69.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	21.0
Healthy Places Index Score for Project Location (b)	47.0
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
Construction: Construction Phases	Construction phasing provided by City.
Construction: Off-Road Equipment	Equipment list provided by City.

Construction Emissions

Phase 1 (2025)	ROG	Nox	CO	SO2	PM10	PM2.5	CO2e
Off-road	5.51	47.8	50	0.11	1.94	1.79	1446
Dust					3.77	1.44	
On-road	0.21	0.16	2.43	0	0.44	0.1	56.9
Total	5.7	48.0	52.4	0.1	6.2	3.3	1502.9

Phase 1 (2026)	ROG	Nox	CO	SO2	PM10	PM2.5	CO2e
Off-road	5.28	44.4	49.2	0.11	1.75	1.61	1446
Dust					3.77	1.44	
On-road	0.19	0.15	2.27	0	0.44	0.1	55.8
Total	5.5	44.6	51.5	0.1	6.0	3.2	1501.8

Phase 2 (2027)	ROG	Nox	CO	SO2	PM10	PM2.5	CO2e
Off-road	4.24	33.5	38.1	0.1	1.3	1.2	618
Dust					3.27	1.26	
On-road	0.14	0.1	1.64	0	0.34	0.08	20.7
Total	4.4	33.6	39.7	0.1	4.9	2.5	638.7

Phase 3 (2027)	ROG	Nox	CO	SO2	PM10	PM2.5	CO2e
Off-road	1.61	12.1	17.1	0.04	0.44	0.41	345
On-road	0.1	0.07	1.13	0	0.23	0.05	19.1
Total	1.7	12.2	18.2	0.0	0.7	0.5	364.1

Phases 2/3 Overlap	ROG	Nox	CO	SO2	PM10	PM2.5	CO2e
Off-road	5.85	45.6	55.2	0.14	1.74	1.61	
Dust	0	0	0	0	3.27	1.26	
On-road	0.24	0.17	2.77	0	0.57	0.13	
Total	6.1	45.8	58.0	0.1	5.6	3.0	0.0

Max	ROG	Nox	CO	SO2	PM10	PM2.5	CO2e
Off-road	5.85	47.8	55.2	0.14	1.94	1.79	
Dust	0	0	0	0	3.77	1.44	
On-road	0.24	0.16	2.77	0	0.44	0.1	
Total	6.1	48.0	58.0	0.1	6.2	3.3	4007.5