

Appendix B

Air Quality and Greenhouse Gas Emissions Modeling Results

Morgan Hill Two Annexations Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Morgan Hill Two Annexations
Construction Start Date	1/1/2026
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	32.8000
Location	37.111049443445665, -121.63792544645469
County	Santa Clara
City	Morgan Hill
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1908
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.37

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
City Park	32.6400	Acre	32.6400	0.00000	662,983	662,983	—	—

Single Family Housing	4.00000	Dwelling Unit	10.1000	7,800.00	46,851.0	—	12.0000	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.33865	5.31706	29.2007	29.4753	0.06093	1.24251	7.81090	9.05341	1.14311	3.97386	5.11697	—	6,766.74	6,766.74	0.27075	0.06002	0.61378	6,792.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.33863	5.31704	29.2120	29.3777	0.04890	1.24251	7.81090	9.05341	1.14311	3.97386	5.11697	—	5,434.25	5,434.25	0.21838	0.04904	0.01591	5,454.34
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.81429	1.52337	13.6528	14.5816	0.02772	0.55565	1.44359	1.99924	0.51121	0.63391	1.14513	—	3,017.26	3,017.26	0.12168	0.02853	0.11844	3,028.92
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.33111	0.27802	2.49163	2.66114	0.00506	0.10141	0.26346	0.36486	0.09330	0.11569	0.20899	—	499.541	499.541	0.02015	0.00472	0.01961	501.472

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.79795	3.19919	29.2007	29.4753	0.06093	1.24251	7.81090	9.05341	1.14311	3.97386	5.11697	—	6,766.74	6,766.74	0.27075	0.06002	0.61378	6,792.01
2027	1.23621	1.03421	9.40740	12.9959	0.02348	0.33673	0.01492	0.35165	0.30981	0.00362	0.31343	—	2,420.07	2,420.07	0.09806	0.02156	0.06435	2,429.01
2028	1.19009	0.99561	8.94031	12.9899	0.02348	0.30040	0.01492	0.31531	0.27630	0.00362	0.27992	—	2,419.97	2,419.97	0.09799	0.02112	0.05748	2,428.77
2029	5.33865	5.31706	8.59642	12.9530	0.02347	0.27580	0.12400	0.36304	0.25367	0.02906	0.25729	—	2,418.85	2,418.85	0.09796	0.02111	0.33308	2,427.64
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.79640	3.19275	29.2120	29.3777	0.04890	1.24251	7.81090	9.05341	1.14311	3.97386	5.11697	—	5,434.25	5,434.25	0.21838	0.04904	0.01591	5,454.34
2027	1.23606	1.03407	9.40859	12.9885	0.02348	0.33673	0.01492	0.35165	0.30981	0.00362	0.31343	—	2,419.20	2,419.20	0.09812	0.02157	0.00167	2,428.09
2028	1.18987	0.99547	8.94195	12.9830	0.02348	0.30040	0.01492	0.31531	0.27630	0.00362	0.27992	—	2,419.12	2,419.12	0.09805	0.02150	0.00149	2,427.98
2029	5.33863	5.31704	8.59763	12.9466	0.02347	0.27580	0.01492	0.29072	0.25367	0.00362	0.25729	—	2,418.01	2,418.01	0.09800	0.02148	0.00132	2,426.87
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.81429	1.52337	13.6528	14.5816	0.02772	0.55565	1.44359	1.99924	0.51121	0.63391	1.14513	—	3,017.26	3,017.26	0.12168	0.02853	0.11844	3,028.92
2027	0.88286	0.73858	6.72019	9.27716	0.01677	0.24052	0.01044	0.25096	0.22129	0.00253	0.22382	—	1,728.09	1,728.09	0.07007	0.01541	0.01983	1,734.45
2028	0.85228	0.71298	6.40411	9.29865	0.01682	0.21516	0.01047	0.22562	0.19790	0.00254	0.20044	—	1,732.76	1,732.76	0.07021	0.01539	0.01775	1,739.12
2029	1.29624	1.21337	3.80566	5.80238	0.00976	0.12485	0.02325	0.14810	0.11484	0.00548	0.12032	—	1,026.83	1,026.83	0.04128	0.00952	0.02905	1,030.73
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.33111	0.27802	2.49163	2.66114	0.00506	0.10141	0.26346	0.36486	0.09330	0.11569	0.20899	—	499.541	499.541	0.02015	0.00472	0.01961	501.472
2027	0.16112	0.13479	1.22643	1.69308	0.00306	0.04390	0.00190	0.04580	0.04039	0.00046	0.04085	—	286.104	286.104	0.01160	0.00255	0.00328	287.158
2028	0.15554	0.13012	1.16875	1.69700	0.00307	0.03927	0.00191	0.04118	0.03612	0.00046	0.03658	—	286.878	286.878	0.01162	0.00255	0.00294	287.931
2029	0.23656	0.22144	0.69453	1.05893	0.00178	0.02279	0.00424	0.02703	0.02096	0.00100	0.02196	—	170.004	170.004	0.00683	0.00158	0.00481	170.649

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.44939	3.30217	1.32728	15.4015	0.03658	0.02239	3.58769	3.61008	0.02094	0.90945	0.93039	3.47977	3,822.63	3,826.11	0.52912	0.15569	9.63541	3,895.37
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.33806	3.18144	1.54830	14.7800	0.03441	0.02230	3.58769	3.60999	0.02088	0.90945	0.93033	3.47977	3,603.79	3,607.27	0.55508	0.17117	0.30424	3,672.46
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.31512	3.16375	1.44496	14.2976	0.03463	0.02130	3.51198	3.53328	0.01986	0.89052	0.91038	3.47977	3,617.23	3,620.70	0.54336	0.16476	4.19222	3,687.58
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.60501	0.57738	0.26370	2.60931	0.00632	0.00389	0.64094	0.64482	0.00362	0.16252	0.16614	0.57612	598.873	599.449	0.08996	0.02728	0.69407	610.521

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.44182	2.29648	1.31187	15.1683	0.03648	0.02121	3.58769	3.60890	0.01979	0.90945	0.92924	—	3,715.43	3,715.43	0.16575	0.15322	9.57954	3,774.81
Area	1.00757	1.00569	0.01540	0.23318	0.00009	0.00118	—	0.00118	0.00115	—	0.00115	0.00000	17.4515	17.4515	0.00034	0.00004	—	17.4710
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	44.1089	44.1089	0.00714	0.00086	—	44.5451
Water	—	—	—	—	—	—	—	—	—	—	—	0.27798	45.6414	45.9194	0.03589	0.00157	—	47.2851
Waste	—	—	—	—	—	—	—	—	—	—	—	3.20179	0.00000	3.20179	0.32001	0.00000	—	11.2020
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05586	0.05586
Total	3.44939	3.30217	1.32728	15.4015	0.03658	0.02239	3.58769	3.61008	0.02094	0.90945	0.93039	3.47977	3,822.63	3,826.11	0.52912	0.15569	9.63541	3,895.37
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	2.35128	2.19544	1.53503	14.7743	0.03433	0.02123	3.58769	3.60892	0.01980	0.90945	0.92925	—	3,497.19	3,497.19	0.19174	0.16870	0.24838	3,552.50
Area	0.98678	0.98600	0.01327	0.00565	0.00008	0.00107	—	0.00107	0.00107	—	0.00107	0.00000	16.8447	16.8447	0.00032	0.00003	—	16.8621
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	44.1089	44.1089	0.00714	0.00086	—	44.5451
Water	—	—	—	—	—	—	—	—	—	—	—	0.27798	45.6414	45.9194	0.03589	0.00157	—	47.2851
Waste	—	—	—	—	—	—	—	—	—	—	—	3.20179	0.00000	3.20179	0.32001	0.00000	—	11.2020
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05586	0.05586
Total	3.33806	3.18144	1.54830	14.7800	0.03441	0.02230	3.58769	3.60999	0.02088	0.90945	0.93033	3.47977	3,603.79	3,607.27	0.55508	0.17117	0.30424	3,672.46
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.31960	2.16879	1.44358	14.1852	0.03462	0.02122	3.51198	3.53320	0.01980	0.89052	0.91032	—	3,526.76	3,526.76	0.18031	0.16232	4.13636	3,583.78
Area	0.99552	0.99495	0.00138	0.11235	0.00001	0.00008	—	0.00008	0.00007	—	0.00007	0.00000	0.71457	0.71457	0.00002	< 0.000005	—	0.71605
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	44.1089	44.1089	0.00714	0.00086	—	44.5451
Water	—	—	—	—	—	—	—	—	—	—	—	0.27798	45.6414	45.9194	0.03589	0.00157	—	47.2851
Waste	—	—	—	—	—	—	—	—	—	—	—	3.20179	0.00000	3.20179	0.32001	0.00000	—	11.2020
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05586	0.05586
Total	3.31512	3.16375	1.44496	14.2976	0.03463	0.02130	3.51198	3.53328	0.01986	0.89052	0.91038	3.47977	3,617.23	3,620.70	0.54336	0.16476	4.19222	3,687.58
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.42333	0.39580	0.26345	2.58880	0.00632	0.00387	0.64094	0.64481	0.00361	0.16252	0.16613	—	583.895	583.895	0.02985	0.02687	0.68482	593.335
Area	0.18168	0.18158	0.00025	0.02050	< 0.000005	0.00001	—	0.00001	0.00001	—	0.00001	0.00000	0.11830	0.11830	< 0.000005	< 0.000005	—	0.11855
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	7.30273	7.30273	0.00118	0.00014	—	7.37494
Water	—	—	—	—	—	—	—	—	—	—	—	0.04602	7.55645	7.60247	0.00594	0.00026	—	7.82858
Waste	—	—	—	—	—	—	—	—	—	—	—	0.53009	0.00000	0.53009	0.05298	0.00000	—	1.85462
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00925	0.00925
Total	0.60501	0.57738	0.26370	2.60931	0.00632	0.00389	0.64094	0.64482	0.00362	0.16252	0.16614	0.57612	598.873	599.449	0.08996	0.02728	0.69407	610.521

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72490	2.28674	20.6515	19.0056	0.03253	0.84309	—	0.84309	0.77564	—	0.77564	—	3,426.59	3,426.59	0.13900	0.02780	—	3,438.35
Demolition	—	—	—	—	—	—	0.05603	0.05603	—	0.00848	0.00848	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37327	0.31325	2.82898	2.60350	0.00446	0.11549	—	0.11549	0.10625	—	0.10625	—	469.396	469.396	0.01904	0.00381	—	471.007
Demolition	—	—	—	—	—	—	0.00767	0.00767	—	0.00116	0.00116	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06812	0.05717	0.51629	0.47514	0.00081	0.02108	—	0.02108	0.01939	—	0.01939	—	77.7139	77.7139	0.00315	0.00063	—	77.9806
Demolition	—	—	—	—	—	—	0.00140	0.00140	—	0.00021	0.00021	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04709	0.04190	0.04154	0.48820	0.00000	0.00000	0.12400	0.12400	0.00000	0.02906	0.02906	—	116.841	116.841	0.00298	0.00519	0.01195	118.475
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00734	0.00151	0.09462	0.04453	0.00048	0.00092	0.01928	0.02020	0.00092	0.00528	0.00620	—	73.0303	73.0303	0.00578	0.01174	0.00395	76.6770
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00631	0.00565	0.00502	0.06610	0.00000	0.00000	0.01663	0.01663	0.00000	0.00389	0.00389	—	16.1809	16.1809	0.00036	0.00067	0.02721	16.4157
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00101	0.00021	0.01271	0.00607	0.00007	0.00013	0.00260	0.00272	0.00013	0.00071	0.00084	—	10.0018	10.0018	0.00079	0.00161	0.00898	10.5098
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00115	0.00103	0.00092	0.01206	0.00000	0.00000	0.00303	0.00303	0.00000	0.00071	0.00071	—	2.67894	2.67894	0.00006	0.00011	0.00450	2.71780
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00018	0.00004	0.00232	0.00111	0.00001	0.00002	0.00047	0.00050	0.00002	0.00013	0.00015	—	1.65592	1.65592	0.00013	0.00027	0.00149	1.74002

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

Off-Road Equipment	3.74146	3.14387	29.1635	28.8082	0.04890	1.24251	—	1.24251	1.14311	—	1.14311	—	5,297.94	5,297.94	0.21491	0.04298	—	5,316.12
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74146	3.14387	29.1635	28.8082	0.04890	1.24251	—	1.24251	1.14311	—	1.14311	—	5,297.94	5,297.94	0.21491	0.04298	—	5,316.12
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30752	0.25840	2.39700	2.36780	0.00402	0.10212	—	0.10212	0.09395	—	0.09395	—	435.447	435.447	0.01766	0.00353	—	436.941
Dust From Material Movement	—	—	—	—	—	—	0.63010	0.63010	—	0.32383	0.32383	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.05612	0.04716	0.43745	0.43212	0.00073	0.01864	—	0.01864	0.01715	—	0.01715	—	72.0932	72.0932	0.00292	0.00058	—	72.3406
Dust From Material Movement	—	—	—	—	—	—	0.11499	0.11499	—	0.05910	0.05910	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05648	0.05533	0.03711	0.66710	0.00000	0.00000	0.14466	0.14466	0.00000	0.03391	0.03391	—	147.144	147.144	0.00270	0.00567	0.53705	149.438
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05494	0.04888	0.04846	0.56957	0.00000	0.00000	0.14466	0.14466	0.00000	0.03391	0.03391	—	136.315	136.315	0.00347	0.00606	0.01394	138.221
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00442	0.00395	0.00352	0.04627	0.00000	0.00000	0.01164	0.01164	0.00000	0.00272	0.00272	—	11.3267	11.3267	0.00025	0.00047	0.01905	11.4910
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00081	0.00072	0.00064	0.00844	0.00000	0.00000	0.00212	0.00212	0.00000	0.00050	0.00050	—	1.87526	1.87526	0.00004	0.00008	0.00315	1.90246
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62261	3.04400	27.2253	27.5707	0.06093	1.12137	—	1.12137	1.03166	—	1.03166	—	6,598.58	6,598.58	0.26767	0.05353	—	6,621.22
Dust From Material Movement	—	—	—	—	—	—	3.58940	3.58940	—	1.42496	1.42496	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74437	0.62548	5.59423	5.66520	0.01252	0.23042	—	0.23042	0.21199	—	0.21199	—	1,355.87	1,355.87	0.05500	0.01100	—	1,360.52
Dust From Material Movement	—	—	—	—	—	—	0.73755	0.73755	—	0.29280	0.29280	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13585	0.11415	1.02095	1.03390	0.00228	0.04205	—	0.04205	0.03869	—	0.03869	—	224.480	224.480	0.00911	0.00182	—	225.250
Dust From Material Movement	—	—	—	—	—	—	0.13460	0.13460	—	0.05344	0.05344	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06455	0.06323	0.04242	0.76240	0.00000	0.00000	0.16533	0.16533	0.00000	0.03875	0.03875	—	168.164	168.164	0.00309	0.00648	0.61378	170.787
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01263	0.01130	0.01005	0.13220	0.00000	0.00000	0.03326	0.03326	0.00000	0.00778	0.00778	—	32.3619	32.3619	0.00072	0.00133	0.05442	32.8313
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00230	0.00206	0.00183	0.02413	0.00000	0.00000	0.00607	0.00607	0.00000	0.00142	0.00142	—	5.35788	5.35788	0.00012	0.00022	0.00901	5.43560
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Building Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36319	0.30391	2.79615	3.67931	0.00664	0.10745	—	0.10745	0.09885	—	0.09885	—	680.235	680.235	0.02759	0.00552	—	682.569
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06628	0.05546	0.51030	0.67147	0.00121	0.01961	—	0.01961	0.01804	—	0.01804	—	112.621	112.621	0.00457	0.00091	—	113.007
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00465	0.00455	0.00305	0.05489	0.00000	0.00000	0.01190	0.01190	0.00000	0.00279	0.00279	—	12.1078	12.1078	0.00022	0.00047	0.04419	12.2966
Vendor	0.00107	0.00035	0.01406	0.00689	0.00008	0.00016	0.00301	0.00317	0.00016	0.00083	0.00099	—	11.3362	11.3362	0.00064	0.00166	0.02763	11.8741
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00452	0.00402	0.00399	0.04687	0.00000	0.00000	0.01190	0.01190	0.00000	0.00279	0.00279	—	11.2168	11.2168	0.00029	0.00050	0.00115	11.3736
Vendor	0.00105	0.00033	0.01488	0.00699	0.00008	0.00016	0.00301	0.00317	0.00016	0.00083	0.00099	—	11.3433	11.3433	0.00064	0.00166	0.00072	11.8543
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00126	0.00112	0.00100	0.01314	0.00000	0.00000	0.00331	0.00331	0.00000	0.00077	0.00077	—	3.21770	3.21770	0.00007	0.00013	0.00541	3.26437
Vendor	0.00030	0.00010	0.00412	0.00198	0.00002	0.00004	0.00084	0.00088	0.00004	0.00023	0.00028	—	3.21755	3.21755	0.00018	0.00047	0.00337	3.36573
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00023	0.00021	0.00018	0.00240	0.00000	0.00000	0.00060	0.00060	0.00000	0.00014	0.00014	—	0.53273	0.53273	0.00001	0.00002	0.00090	0.54045
Vendor	0.00005	0.00002	0.00075	0.00036	< 0.000005	0.00001	0.00015	0.00016	0.00001	0.00004	0.00005	—	0.53270	0.53270	0.00003	0.00008	0.00056	0.55723
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Building Construction (2027) - Unmitigated

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

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

Off-Road	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87911	0.73563	6.70781	9.24139	0.01671	0.24041	—	0.24041	0.22118	—	0.22118	—	1,712.20	1,712.20	0.06945	0.01389	—	1,718.07
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16044	0.13425	1.22418	1.68655	0.00305	0.04387	—	0.04387	0.04036	—	0.04036	—	283.474	283.474	0.01150	0.00230	—	284.447
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00446	0.00399	0.00302	0.05135	0.00000	0.00000	0.01190	0.01190	0.00000	0.00279	0.00279	—	11.8864	11.8864	0.00019	0.00047	0.03989	12.0701
Vendor	0.00099	0.00035	0.01344	0.00663	0.00008	0.00016	0.00301	0.00317	0.00016	0.00083	0.00099	—	11.1052	11.1052	0.00064	0.00165	0.02446	11.6372
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00433	0.00386	0.00355	0.04378	0.00000	0.00000	0.01190	0.01190	0.00000	0.00279	0.00279	—	11.0122	11.0122	0.00025	0.00047	0.00104	11.1587
Vendor	0.00097	0.00033	0.01411	0.00681	0.00008	0.00016	0.00301	0.00317	0.00016	0.00083	0.00099	—	11.1128	11.1128	0.00063	0.00166	0.00063	11.6235
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00305	0.00271	0.00249	0.03097	0.00000	0.00000	0.00832	0.00832	0.00000	0.00195	0.00195	—	7.95222	7.95222	0.00016	0.00033	0.01229	8.06782
Vendor	0.00070	0.00024	0.00988	0.00480	0.00006	0.00011	0.00211	0.00223	0.00011	0.00059	0.00070	—	7.93457	7.93457	0.00045	0.00119	0.00754	8.30662
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00056	0.00050	0.00045	0.00565	0.00000	0.00000	0.00152	0.00152	0.00000	0.00036	0.00036	—	1.31658	1.31658	0.00003	0.00006	0.00204	1.33572
Vendor	0.00013	0.00004	0.00180	0.00088	0.00001	0.00002	0.00039	0.00041	0.00002	0.00011	0.00013	—	1.31366	1.31366	0.00008	0.00020	0.00125	1.37526
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84861	0.71011	6.39243	9.26478	0.01676	0.21504	—	0.21504	0.19784	—	0.19784	—	1,717.16	1,717.16	0.06966	0.01393	—	1,723.05
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15487	0.12959	1.16662	1.69082	0.00306	0.03925	—	0.03925	0.03611	—	0.03611	—	284.296	284.296	0.01153	0.00231	—	285.271
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00430	0.00383	0.00262	0.04827	0.00000	0.00000	0.01190	0.01190	0.00000	0.00279	0.00279	—	11.6790	11.6790	0.00019	0.00010	0.03585	11.7480
Vendor	0.00098	0.00035	0.01274	0.00638	0.00008	0.00016	0.00301	0.00317	0.00008	0.00083	0.00091	—	10.8340	10.8340	0.00055	0.00157	0.02163	11.3373
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00417	0.00370	0.00352	0.04116	0.00000	0.00000	0.01190	0.01190	0.00000	0.00279	0.00279	—	10.8211	10.8211	0.00025	0.00047	0.00093	10.9674
Vendor	0.00088	0.00033	0.01348	0.00655	0.00008	0.00016	0.00301	0.00317	0.00008	0.00083	0.00091	—	10.8418	10.8418	0.00055	0.00158	0.00056	11.3269
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00297	0.00263	0.00221	0.02925	0.00000	0.00000	0.00835	0.00835	0.00000	0.00195	0.00195	—	7.83539	7.83539	0.00016	0.00033	0.01107	7.95004
Vendor	0.00070	0.00024	0.00947	0.00462	0.00006	0.00011	0.00212	0.00223	0.00006	0.00059	0.00064	—	7.76212	7.76212	0.00039	0.00112	0.00668	8.11381
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00054	0.00048	0.00040	0.00534	0.00000	0.00000	0.00152	0.00152	0.00000	0.00036	0.00036	—	1.29724	1.29724	0.00003	0.00006	0.00183	1.31622
Vendor	0.00013	0.00004	0.00173	0.00084	0.00001	0.00002	0.00039	0.00041	0.00001	0.00011	0.00012	—	1.28511	1.28511	0.00006	0.00019	0.00111	1.34333
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.13. Building Construction (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15336	0.96514	8.58166	12.9012	0.02340	0.27564	—	0.27564	0.25359	—	0.25359	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15336	0.96514	8.58166	12.9012	0.02340	0.27564	—	0.27564	0.25359	—	0.25359	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.36339	0.30408	2.70381	4.06477	0.00737	0.08685	—	0.08685	0.07990	—	0.07990	—	755.166	755.166	0.03063	0.00613	—	757.758
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06632	0.05550	0.49345	0.74182	0.00135	0.01585	—	0.01585	0.01458	—	0.01458	—	125.026	125.026	0.00507	0.00101	—	125.455
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00411	0.00364	0.00259	0.04557	0.00000	0.00000	0.01190	0.01190	0.00000	0.00279	0.00279	—	11.4838	11.4838	0.00019	0.00010	0.03198	11.5489
Vendor	0.00090	0.00035	0.01218	0.00620	0.00008	0.00016	0.00301	0.00317	0.00008	0.00083	0.00091	—	10.5310	10.5310	0.00055	0.00157	0.01914	11.0318
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00401	0.00351	0.00312	0.03898	0.00000	0.00000	0.01190	0.01190	0.00000	0.00279	0.00279	—	10.6410	10.6410	0.00022	0.00047	0.00083	10.7864
Vendor	0.00088	0.00033	0.01286	0.00637	0.00008	0.00016	0.00301	0.00317	0.00008	0.00083	0.00091	—	10.5391	10.5391	0.00055	0.00157	0.00050	11.0213
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00125	0.00111	0.00084	0.01209	0.00000	0.00000	0.00367	0.00367	0.00000	0.00086	0.00086	—	3.38933	3.38933	0.00007	0.00015	0.00435	3.43925
Vendor	0.00028	0.00011	0.00396	0.00198	0.00002	0.00005	0.00093	0.00098	0.00002	0.00026	0.00028	—	3.31906	3.31906	0.00017	0.00049	0.00260	3.47343
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00023	0.00020	0.00015	0.00221	0.00000	0.00000	0.00067	0.00067	0.00000	0.00016	0.00016	—	0.56114	0.56114	0.00001	0.00002	0.00072	0.56941
Vendor	0.00005	0.00002	0.00072	0.00036	< 0.000005	0.00001	0.00017	0.00018	< 0.000005	0.00005	0.00005	—	0.54951	0.54951	0.00003	0.00008	0.00043	0.57507

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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3.15. Paving (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80047	0.67262	6.45817	9.91841	0.01395	0.23904	—	0.23904	0.21992	—	0.21992	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12062	0.10135	0.97315	1.49455	0.00210	0.03602	—	0.03602	0.03314	—	0.03314	—	227.628	227.628	0.00923	0.00185	—	228.410
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02201	0.01850	0.17760	0.27276	0.00038	0.00657	—	0.00657	0.00605	—	0.00605	—	37.6865	37.6865	0.00153	0.00031	—	37.8158
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04279	0.03793	0.02695	0.47468	0.00000	0.00000	0.12400	0.12400	0.00000	0.02906	0.02906	—	119.623	119.623	0.00198	0.00099	0.33308	120.301
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00625	0.00552	0.00416	0.06024	0.00000	0.00000	0.01829	0.01829	0.00000	0.00428	0.00428	—	16.8853	16.8853	0.00035	0.00073	0.02168	17.1340
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00114	0.00101	0.00076	0.01099	0.00000	0.00000	0.00334	0.00334	0.00000	0.00078	0.00078	—	2.79555	2.79555	0.00006	0.00012	0.00359	2.83672
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.17. Architectural Coating (2029) - Unmitigated

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

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

Off-Road Equipment	0.12385	0.10236	0.79416	1.11216	0.00173	0.01284	—	0.01284	0.01181	—	0.01181	—	133.510	133.510	0.00542	0.00108	—	133.968
Architectural Coatings	5.21398	5.21398	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12385	0.10236	0.79416	1.11216	0.00173	0.01284	—	0.01284	0.01181	—	0.01181	—	133.510	133.510	0.00542	0.00108	—	133.968
Architectural Coatings	5.21398	5.21398	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01866	0.01542	0.11967	0.16759	0.00026	0.00193	—	0.00193	0.00178	—	0.00178	—	20.1179	20.1179	0.00082	0.00016	—	20.1869
Architectural Coatings	0.78567	0.78567	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.00341	0.00281	0.02184	0.03058	0.00005	0.00035	—	0.00035	0.00032	—	0.00032	—	3.33075	3.33075	0.00014	0.00003	—	3.34218
Architectural Coatings	0.14338	0.14338	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00082	0.00073	0.00052	0.00911	0.00000	0.00000	0.00238	0.00238	0.00000	0.00056	0.00056	—	2.29676	2.29676	0.00004	0.00002	0.00640	2.30978
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00080	0.00070	0.00062	0.00780	0.00000	0.00000	0.00238	0.00238	0.00000	0.00056	0.00056	—	2.12819	2.12819	0.00004	0.00009	0.00017	2.15728
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00012	0.00011	0.00008	0.00116	0.00000	0.00000	0.00035	0.00035	0.00000	0.00008	0.00008	—	0.32420	0.32420	0.00001	0.00001	0.00042	0.32897
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00002	0.00002	0.00001	0.00021	0.00000	0.00000	0.00006	0.00006	0.00000	0.00002	0.00002	—	0.05367	0.05367	< 0.000005	< 0.000005	0.00007	0.05447
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	2.33701	2.19846	1.25137	14.4552	0.03471	0.02020	3.41216	3.43235	0.01884	0.86495	0.88380	—	3,534.64	3,534.64	0.15833	0.14609	9.11085	3,591.25
Single Family Housing	0.10480	0.09802	0.06050	0.71314	0.00178	0.00101	0.17553	0.17655	0.00095	0.04450	0.04544	—	180.791	180.791	0.00741	0.00712	0.46870	183.568
Total	2.44182	2.29648	1.31187	15.1683	0.03648	0.02121	3.58769	3.60890	0.01979	0.90945	0.92924	—	3,715.43	3,715.43	0.16575	0.15322	9.57954	3,774.81
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	2.25029	2.10165	1.46423	14.0937	0.03266	0.02021	3.41216	3.43237	0.01886	0.86495	0.88381	—	3,327.10	3,327.10	0.18326	0.16087	0.23622	3,379.86
Single Family Housing	0.10098	0.09379	0.07079	0.68059	0.00167	0.00102	0.17553	0.17655	0.00095	0.04450	0.04544	—	170.087	170.087	0.00848	0.00783	0.01215	172.644
Total	2.35128	2.19544	1.53503	14.7743	0.03433	0.02123	3.58769	3.60892	0.01980	0.90945	0.92925	—	3,497.19	3,497.19	0.19174	0.16870	0.24838	3,552.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.40514	0.37889	0.25130	2.46876	0.00601	0.00369	0.60958	0.61326	0.00344	0.15457	0.15801	—	555.494	555.494	0.02853	0.02563	0.65132	564.495
Single Family Housing	0.01819	0.01691	0.01215	0.12004	0.00031	0.00019	0.03136	0.03154	0.00017	0.00795	0.00812	—	28.4013	28.4013	0.00133	0.00125	0.03351	28.8400
Total	0.42333	0.39580	0.26345	2.58880	0.00632	0.00387	0.64094	0.64481	0.00361	0.16252	0.16613	—	583.895	583.895	0.02985	0.02687	0.68482	593.335

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	44.1089	44.1089	0.00714	0.00086	—	44.5451
Total	—	—	—	—	—	—	—	—	—	—	—	—	44.1089	44.1089	0.00714	0.00086	—	44.5451
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	44.1089	44.1089	0.00714	0.00086	—	44.5451
Total	—	—	—	—	—	—	—	—	—	—	—	—	44.1089	44.1089	0.00714	0.00086	—	44.5451
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	7.30273	7.30273	0.00118	0.00014	—	7.37494
Total	—	—	—	—	—	—	—	—	—	—	—	—	7.30273	7.30273	0.00118	0.00014	—	7.37494

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Single Family Housing	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Single Family Housing	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Single Family Housing	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00155	0.00078	0.01327	0.00565	0.00008	0.00107	—	0.00107	0.00107	—	0.00107	0.00000	16.8447	16.8447	0.00032	0.00003	—	16.8621
Consumer Products	0.90666	0.90666	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07857	0.07857	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02079	0.01969	0.00213	0.22754	0.00001	0.00010	—	0.00010	0.00008	—	0.00008	—	0.60675	0.60675	0.00003	0.00001	—	0.60888
Total	1.00757	1.00569	0.01540	0.23318	0.00009	0.00118	—	0.00118	0.00115	—	0.00115	0.00000	17.4515	17.4515	0.00034	0.00004	—	17.4710
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00155	0.00078	0.01327	0.00565	0.00008	0.00107	—	0.00107	0.00107	—	0.00107	0.00000	16.8447	16.8447	0.00032	0.00003	—	16.8621
Consumer Products	0.90666	0.90666	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07857	0.07857	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.98678	0.98600	0.01327	0.00565	0.00008	0.00107	—	0.00107	0.00107	—	0.00107	0.00000	16.8447	16.8447	0.00032	0.00003	—	16.8621
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00001	< 0.000005	0.00006	0.00003	< 0.000005	< 0.000005	—	< 0.000005	< 0.000005	—	< 0.000005	0.00000	0.06877	0.06877	< 0.000005	< 0.000005	—	0.06884
Consumer Products	0.16547	0.16547	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.01434	0.01434	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00187	0.00177	0.00019	0.02048	< 0.000005	0.00001	—	0.00001	0.00001	—	0.00001	—	0.04954	0.04954	< 0.000005	< 0.000005	—	0.04971
Total	0.18168	0.18158	0.00025	0.02050	< 0.000005	0.00001	—	0.00001	0.00001	—	0.00001	0.00000	0.11830	0.11830	< 0.000005	< 0.000005	—	0.11855

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00000	43.4284	43.4284	0.00703	0.00085	—	43.8579
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.27798	2.21293	2.49091	0.02886	0.00072	—	3.42720
Total	—	—	—	—	—	—	—	—	—	—	—	0.27798	45.6414	45.9194	0.03589	0.00157	—	47.2851
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00000	43.4284	43.4284	0.00703	0.00085	—	43.8579
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.27798	2.21293	2.49091	0.02886	0.00072	—	3.42720
Total	—	—	—	—	—	—	—	—	—	—	—	0.27798	45.6414	45.9194	0.03589	0.00157	—	47.2851
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00000	7.19008	7.19008	0.00116	0.00014	—	7.26117
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.04602	0.36638	0.41240	0.00478	0.00012	—	0.56741
Total	—	—	—	—	—	—	—	—	—	—	—	0.04602	7.55645	7.60247	0.00594	0.00026	—	7.82858

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51282	0.00000	1.51282	0.15120	0.00000	—	5.29285
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.68897	0.00000	1.68897	0.16881	0.00000	—	5.90914
Total	—	—	—	—	—	—	—	—	—	—	—	3.20179	0.00000	3.20179	0.32001	0.00000	—	11.2020
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51282	0.00000	1.51282	0.15120	0.00000	—	5.29285
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.68897	0.00000	1.68897	0.16881	0.00000	—	5.90914
Total	—	—	—	—	—	—	—	—	—	—	—	3.20179	0.00000	3.20179	0.32001	0.00000	—	11.2020
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.25047	0.00000	0.25047	0.02503	0.00000	—	0.87629

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.27963	0.00000	0.27963	0.02795	0.00000	—	0.97832
Total	—	—	—	—	—	—	—	—	—	—	—	0.53009	0.00000	0.53009	0.05298	0.00000	—	1.85462

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05586	0.05586
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05586	0.05586
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05586	0.05586
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05586	0.05586
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00925	0.00925
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00925	0.00925

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	3/12/2026	5.00000	50.0000	—
Site Preparation	Site Preparation	3/13/2026	4/24/2026	5.00000	30.0000	—
Grading	Grading	4/25/2026	8/8/2026	5.00000	75.0000	—
Building Construction	Building Construction	8/9/2026	6/10/2029	5.00000	740.000	—
Paving	Paving	6/11/2029	8/27/2029	5.00000	55.0000	—
Architectural Coating	Architectural Coating	8/28/2029	11/13/2029	5.00000	55.0000	—

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	2.00000	8.00000	367.000	0.40000
Demolition	Excavators	Diesel	Average	3.00000	8.00000	36.0000	0.38000
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Grading	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000

Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15.0000	11.7000	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40000	HHDT,MHDT
Demolition	Hauling	1.04000	20.0000	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	17.5000	11.7000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	20.0000	11.7000	LDA,LDT1,LDT2
Grading	Vendor	—	8.40000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	1.44000	11.7000	LDA,LDT1,LDT2
Building Construction	Vendor	0.42760	8.40000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT

Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	11.7000	LDA,LDT1,LDT2
Paving	Vendor	—	8.40000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	0.28800	11.7000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	15,795.0	5,265.00	25,440.0	8,480.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	4,500.00	0.00000
Site Preparation	—	—	45.0000	0.00000	0.00000
Grading	—	—	225.000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	14.1841

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

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	City Park	14.1400	0%
Paving	Single Family Housing	0.04408	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00000	203.983	0.03300	0.00400
2027	0.00000	203.983	0.03300	0.00400
2028	0.00000	203.983	0.03300	0.00400
2029	0.00000	203.983	0.03300	0.00400

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
City Park	828.000	828.000	828.000	302,220	4,838.39	4,838.39	4,838.39	1,766,011
Single Family Housing	36.0000	36.0000	36.0000	13,140.0	248.905	248.905	248.905	90,850.2

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
City Park	Wood Fireplaces	0	0
City Park	Gas Fireplaces	0	0
City Park	Propane Fireplaces	0	0
City Park	Electric Fireplaces	0	0
City Park	No Fireplaces	0	0
City Park	Conventional Wood Stoves	0	0
City Park	Catalytic Wood Stoves	0	0
City Park	Non-Catalytic Wood Stoves	0	0
City Park	Pellet Wood Stoves	0	0
Single Family Housing	Wood Fireplaces	0	0
Single Family Housing	Gas Fireplaces	1	1
Single Family Housing	Propane Fireplaces	0	0
Single Family Housing	Electric Fireplaces	0	0
Single Family Housing	No Fireplaces	3	3
Single Family Housing	Conventional Wood Stoves	0	0
Single Family Housing	Catalytic Wood Stoves	0	0
Single Family Housing	Non-Catalytic Wood Stoves	0	0
Single Family Housing	Pellet Wood Stoves	0	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)
15,795.0	5,265.00	25,440.0	8,480.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

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)
City Park	0.00000	203.983	0.0330	0.0040	0.00000
Single Family Housing	78,926.9	203.983	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00000	15,750,161
Single Family Housing	145,066	612,159

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	2.80704	0.00000
Single Family Housing	3.13388	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.03750	1.000000	0.00000	1.000000
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088.00	0.00225	2.50000	2.50000	10.00000
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430.00	0.11538	0.60000	0.00000	1.000000

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

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

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	13.2700	annual days of extreme heat
Extreme Precipitation	7.30000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	26.2600	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	2	0	0	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	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
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	35.1587
AQ-PM	6.55881
AQ-DPM	81.2446
Drinking Water	44.7983
Lead Risk Housing	23.7555
Pesticides	63.6207
Toxic Releases	14.0535
Traffic	79.6125
Effect Indicators	—
CleanUp Sites	68.9436
Groundwater	81.3382
Haz Waste Facilities/Generators	86.4196
Impaired Water Bodies	58.6938
Solid Waste	72.3940
Sensitive Population	—
Asthma	39.7308
Cardio-vascular	61.1291
Low Birth Weights	66.2818

Socioeconomic Factor Indicators	—
Education	41.8502
Housing	72.9785
Linguistic	51.5090
Poverty	47.3241
Unemployment	67.4779

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	36.27614526
Employed	72.42397023
Median HI	39.6894649
Education	—
Bachelor's or higher	39.89477736
High school enrollment	100
Preschool enrollment	48.45374054
Transportation	—
Auto Access	30.77120493
Active commuting	47.01655332
Social	—
2-parent households	23.61093289
Voting	68.48453741
Neighborhood	—
Alcohol availability	48.7488772
Park access	24.53483896
Retail density	56.71756705

Supermarket access	66.09778006
Tree canopy	14.8209932
Housing	—
Homeownership	27.52470166
Housing habitability	18.88874631
Low-inc homeowner severe housing cost burden	35.51905556
Low-inc renter severe housing cost burden	3.451815732
Uncrowded housing	45.96432696
Health Outcomes	—
Insured adults	37.58501219
Arthritis	0.0
Asthma ER Admissions	60.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	48.4
Cognitively Disabled	68.5
Physically Disabled	90.7
Heart Attack ER Admissions	39.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	58.1
Physical Health Not Good	0.0
Stroke	0.0

Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	26.6
Elderly	74.7
English Speaking	37.3
Foreign-born	51.7
Outdoor Workers	25.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	45.1
Traffic Density	68.8
Traffic Access	54.6
Other Indices	—
Hardship	60.7
Other Decision Support	—
2016 Voting	65.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0000
Healthy Places Index Score for Project Location (b)	44.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
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

8.1. Justifications

Screen	Justification
Land Use	Condit Park and Butterfield Sports Park combined into City Park land use. Rose Orchard Ct acreage excludes area to be preserved as open space. Default square footages for residential uses.
Construction: Paving	Hardscape area provided by applicant for both City Park uses
Operations: Vehicle Data	Per project-specific VMT assessment. Condit and Butterfield trips allocated to "City Park". (Hexagon 2025)
Operations: Energy Use	Natural gas converted to electricity; project would not include natural gas

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	1.29870	10.1000

8.4. Construction

8.4.9. Paving

Phase Name	Land Use	Model Parameter	Units	Default Value	New Value
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Paving	City Park	Area Paved	acres	0.00000	14.1400
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8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
City Park	Weekday Trip Rate	size/day	0.78000	25.3676
City Park	Saturday Trip Rate	size/day	1.96000	25.3676
City Park	Sunday Trip Rate	size/day	2.19000	25.3676
Single Family Housing	Weekday Trip Rate	size/day	9.44000	9.00000
Single Family Housing	Saturday Trip Rate	size/day	9.54000	9.00000
Single Family Housing	Sunday Trip Rate	size/day	8.55000	9.00000

8.5.3. Energy Usage

Land Use	Model Parameter	Units	Default Value	New Value
Single Family Housing	Electricity	kWh/yr	24,739.4	78,926.9
Single Family Housing	Electricity (Subject to Title 24)	kWh/yr	3,581.26	54,611.4
Single Family Housing	Electricity (Not Subject to Title 24)	kWh/yr	21,158.2	24,315.5
Single Family Housing	Natural Gas	kBTU/yr	184,888	0.00000
Single Family Housing	Natural Gas (Subject to Title 24)	kBTU/yr	174,115	0.00000
Single Family Housing	Natural Gas (Not Subject to Title 24)	kBTU/yr	10,772.7	0.00000