

Appendix AQ

California Emissions Estimator Model (CalEEMod) Output Files

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

**Rezoning Sites for Housing Project - Sonoma County
Sonoma-San Francisco County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	38.00	Dwelling Unit	12.34	68,400.00	109

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

Project Characteristics -

Land Use -

Construction Phase - Grading portion extended to represent a realistic length for amount of soil import/export.

Trips and VMT -

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Adjusted trip rates for VMT total

Woodstoves - '

Area Coating -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	60.00
tblGrading	MaterialExported	0.00	5,808.00
tblGrading	MaterialImported	0.00	5,808.00
tblVehicleTrips	ST_TR	9.91	3.50
tblVehicleTrips	SU_TR	8.62	3.50
tblVehicleTrips	WD_TR	9.52	3.50

2.0 Emissions Summary

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	41.2029	0.7945	54.0728	0.0961		7.2192	7.2192		7.2192	7.2192	774.3769	240.3509	1,014.7277	0.9630	0.0546	1,055.0852
Energy	0.0326	0.2789	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		355.9947	355.9947	6.8200e-003	6.5300e-003	358.1102
Mobile	0.2439	1.2499	2.8601	7.8900e-003	0.6550	8.3800e-003	0.6633	0.1756	7.8800e-003	0.1835		798.5361	798.5361	0.0371		799.4643
Total	41.4793	2.3233	57.0516	0.1058	0.6550	7.2501	7.9051	0.1756	7.2496	7.4252	774.3769	1,394.8816	2,169.2585	1.0069	0.0612	2,212.6596

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	41.2029	0.7945	54.0728	0.0961		7.2192	7.2192		7.2192	7.2192	774.3769	240.3509	1,014.7277	0.9630	0.0546	1,055.0852
Energy	0.0326	0.2789	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		355.9947	355.9947	6.8200e-003	6.5300e-003	358.1102
Mobile	0.2439	1.2499	2.8601	7.8900e-003	0.6550	8.3800e-003	0.6633	0.1756	7.8800e-003	0.1835		798.5361	798.5361	0.0371		799.4643
Total	41.4793	2.3233	57.0516	0.1058	0.6550	7.2501	7.9051	0.1756	7.2496	7.4252	774.3769	1,394.8816	2,169.2585	1.0069	0.0612	2,212.6596

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	
2	Site Preparation	Site Preparation	1/29/2021	2/11/2021	5	10	
3	Grading	Grading	2/12/2021	5/6/2021	5	60	
4	Building Construction	Building Construction	5/7/2021	6/30/2022	5	300	
5	Paving	Paving	7/1/2022	7/28/2022	5	20	
6	Architectural Coating	Architectural Coating	7/29/2022	8/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 150

Acres of Paving: 0

Residential Indoor: 138,510; Residential Outdoor: 46,170; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0880	0.0615	0.5838	1.3800e-003	0.1479	1.1000e-003	0.1490	0.0392	1.0200e-003	0.0402		136.9553	136.9553	4.7100e-003		137.0730
Total	0.0880	0.0615	0.5838	1.3800e-003	0.1479	1.1000e-003	0.1490	0.0392	1.0200e-003	0.0402		136.9553	136.9553	4.7100e-003		137.0730

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0880	0.0615	0.5838	1.3800e-003	0.1479	1.1000e-003	0.1490	0.0392	1.0200e-003	0.0402		136.9553	136.9553	4.7100e-003		137.0730
Total	0.0880	0.0615	0.5838	1.3800e-003	0.1479	1.1000e-003	0.1490	0.0392	1.0200e-003	0.0402		136.9553	136.9553	4.7100e-003		137.0730

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6952	0.0000	8.6952	3.5998	0.0000	3.5998			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6952	1.9853	10.6806	3.5998	1.8265	5.4263		6,007.0434	6,007.0434	1.9428		6,055.6134

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1843	6.6164	1.4534	0.0187	0.4177	0.0228	0.4405	0.1140	0.0218	0.1358		2,011.7262	2,011.7262	0.1280		2,014.9271
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0978	0.0683	0.6487	1.5300e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		152.1726	152.1726	5.2300e-003		152.3033
Total	0.2821	6.6847	2.1021	0.0202	0.5820	0.0240	0.6060	0.1576	0.0229	0.1805		2,163.8988	2,163.8988	0.1333		2,167.2305

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6952	0.0000	8.6952	3.5998	0.0000	3.5998			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6952	1.9853	10.6806	3.5998	1.8265	5.4263	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1843	6.6164	1.4534	0.0187	0.4177	0.0228	0.4405	0.1140	0.0218	0.1358		2,011.7262	2,011.7262	0.1280		2,014.9271
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0978	0.0683	0.6487	1.5300e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		152.1726	152.1726	5.2300e-003		152.3033
Total	0.2821	6.6847	2.1021	0.0202	0.5820	0.0240	0.6060	0.1576	0.0229	0.1805		2,163.8988	2,163.8988	0.1333		2,167.2305

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0132	0.4355	0.1144	1.0400e-003	0.0269	1.1200e-003	0.0280	7.7400e-003	1.0700e-003	8.8100e-003		111.0783	111.0783	6.9700e-003		111.2526
Worker	0.0684	0.0478	0.4541	1.0700e-003	0.1150	8.6000e-004	0.1159	0.0305	7.9000e-004	0.0313		106.5208	106.5208	3.6600e-003		106.6123
Total	0.0816	0.4833	0.5685	2.1100e-003	0.1419	1.9800e-003	0.1439	0.0383	1.8600e-003	0.0401		217.5991	217.5991	0.0106		217.8649

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2439	1.2499	2.8601	7.8900e-003	0.6550	8.3800e-003	0.6633	0.1756	7.8800e-003	0.1835		798.5361	798.5361	0.0371		799.4643
Unmitigated	0.2439	1.2499	2.8601	7.8900e-003	0.6550	8.3800e-003	0.6633	0.1756	7.8800e-003	0.1835		798.5361	798.5361	0.0371		799.4643

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	133.00	133.00	133.00	307,178	307,178
Total	133.00	133.00	133.00	307,178	307,178

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.578299	0.039453	0.169996	0.109068	0.028307	0.006716	0.029274	0.026666	0.003071	0.001838	0.005325	0.000874	0.001112

5.0 Energy Detail

Historical Energy Use: N

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0326	0.2789	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		355.9947	355.9947	6.8200e-003	6.5300e-003	358.1102
NaturalGas Unmitigated	0.0326	0.2789	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		355.9947	355.9947	6.8200e-003	6.5300e-003	358.1102

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	3025.95	0.0326	0.2789	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		355.9947	355.9947	6.8200e-003	6.5300e-003	358.1102
Total		0.0326	0.2789	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		355.9947	355.9947	6.8200e-003	6.5300e-003	358.1102

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	3.02595	0.0326	0.2789	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		355.9947	355.9947	6.8200e-003	6.5300e-003	358.1102
Total		0.0326	0.2789	0.1187	1.7800e-003		0.0226	0.0226		0.0226	0.0226		355.9947	355.9947	6.8200e-003	6.5300e-003	358.1102

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	41.2029	0.7945	54.0728	0.0961		7.2192	7.2192		7.2192	7.2192	774.3769	240.3509	1,014.7277	0.9630	0.0546	1,055.0852
Unmitigated	41.2029	0.7945	54.0728	0.0961		7.2192	7.2192		7.2192	7.2192	774.3769	240.3509	1,014.7277	0.9630	0.0546	1,055.0852

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	39.3801	0.7583	50.9310	0.0959		7.2019	7.2019		7.2019	7.2019	774.3769	234.7059	1,009.0828	0.9575	0.0546	1,049.3034
Landscaping	0.0952	0.0363	3.1419	1.7000e-004		0.0173	0.0173		0.0173	0.0173		5.6450	5.6450	5.4700e-003		5.7818
Total	41.2028	0.7945	54.0728	0.0961		7.2192	7.2192		7.2192	7.2192	774.3769	240.3509	1,014.7277	0.9630	0.0546	1,055.0852

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	39.3801	0.7583	50.9310	0.0959		7.2019	7.2019		7.2019	7.2019	774.3769	234.7059	1,009.0828	0.9575	0.0546	1,049.3034
Landscaping	0.0952	0.0363	3.1419	1.7000e-004		0.0173	0.0173		0.0173	0.0173		5.6450	5.6450	5.4700e-003		5.7818
Total	41.2028	0.7945	54.0728	0.0961		7.2192	7.2192		7.2192	7.2192	774.3769	240.3509	1,014.7277	0.9630	0.0546	1,055.0852

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Rezoning Sites for Housing Project - Sonoma County - Sonoma-San Francisco County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Rezoning Sites for Housing Project - Sonoma County - GHG Analysis - Sonoma-San Francisco County, Annual

Rezoning Sites for Housing Project - Sonoma County - GHG Analysis
Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	2,975.00	Dwelling Unit	965.91	5,355,000.00	8509

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	477.6	CH4 Intensity (lb/MW hr)	0.022	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Rezoning Sites for Housing Project - Sonoma County - GHG Analysis - Sonoma-San Francisco County, Annual

Project Characteristics - 2021 PG&E Intensity Factors

Land Use - 2,975 is total buildout increase over existing zoning; conservatively assumed SF as SF requires more energy than MF

Construction Phase - Schedule adjusted to fit a 10-year timescale.

Trips and VMT - '

Demolition - Assumed 5000 sf per day of demolition

Grading - Assumed 24 trips per day during grading

Architectural Coating -

Vehicle Trips - Adjusted trip rates for VMT total

Woodstoves -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Per BAAQMD rules.

Energy Mitigation -

Water Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	1,000.00	150.00
tblConstructionPhase	NumDays	600.00	150.00
tblConstructionPhase	NumDays	1,550.00	450.00
tblConstructionPhase	NumDays	15,500.00	1,000.00
tblConstructionPhase	NumDays	1,100.00	300.00
tblConstructionPhase	NumDays	1,100.00	300.00
tblGrading	MaterialExported	0.00	43,200.00
tblGrading	MaterialImported	0.00	43,200.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	477.6
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblVehicleTrips	ST_TR	9.91	4.98
tblVehicleTrips	SU_TR	8.62	4.98
tblVehicleTrips	WD_TR	9.52	4.98

2.0 Emissions Summary

Rezoning Sites for Housing Project - Sonoma County - GHG Analysis - Sonoma-San Francisco County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.4754	5.0758	2.9569	6.5100e-003	1.4168	0.2315	1.6483	0.6192	0.2141	0.8333	0.0000	585.0635	585.0635	0.1403	0.0000	588.5704
2022	0.4916	5.6047	3.8128	9.8200e-003	1.7177	0.2144	1.9320	0.6504	0.1973	0.8477	0.0000	883.9070	883.9070	0.2288	0.0000	889.6269
2023	0.5012	5.1043	4.1896	0.0122	1.5500	0.1765	1.7264	0.5135	0.1626	0.6762	0.0000	1,103.7303	1,103.7303	0.2322	0.0000	1,109.5343
2024	0.7761	5.4629	6.2077	0.0237	1.3711	0.0922	1.4632	0.3711	0.0866	0.4577	0.0000	2,197.1578	2,197.1578	0.1482	0.0000	2,200.8631
2025	0.7223	5.2388	5.8616	0.0232	1.3658	0.0803	1.4461	0.3697	0.0754	0.4451	0.0000	2,146.8910	2,146.8910	0.1442	0.0000	2,150.4964
2026	0.6901	5.1683	5.5994	0.0227	1.3658	0.0799	1.4456	0.3697	0.0750	0.4447	0.0000	2,109.1750	2,109.1750	0.1414	0.0000	2,112.7110
2027	0.5035	3.9435	4.3665	0.0168	0.9725	0.0721	1.0447	0.2632	0.0675	0.3307	0.0000	1,550.3333	1,550.3333	0.1232	0.0000	1,553.4120
2028	4.6438	0.9898	1.7571	2.9300e-003	0.0434	0.0481	0.0915	0.0116	0.0443	0.0558	0.0000	258.3658	258.3658	0.0734	0.0000	260.1995
2029	32.8862	0.1864	0.6652	1.9900e-003	0.2192	7.8900e-003	0.2271	0.0583	7.7900e-003	0.0661	0.0000	178.1073	178.1073	4.4500e-003	0.0000	178.2184
2030	0.3779	1.6700e-003	7.2800e-003	2.0000e-005	2.5200e-003	4.0000e-005	2.5600e-003	6.7000e-004	4.0000e-005	7.1000e-004	0.0000	2.0025	2.0025	4.0000e-005	0.0000	2.0036
Maximum	32.8862	5.6047	6.2077	0.0237	1.7177	0.2315	1.9320	0.6504	0.2141	0.8477	0.0000	2,197.1578	2,197.1578	0.2322	0.0000	2,200.8631

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	1.3217	1.3217
2	4-1-2021	6-30-2021	1.3312	1.3312
3	7-1-2021	9-30-2021	1.4258	1.4258
4	10-1-2021	12-31-2021	1.4633	1.4633
5	1-1-2022	3-31-2022	1.3248	1.3248
6	4-1-2022	6-30-2022	1.5810	1.5810
7	7-1-2022	9-30-2022	1.5984	1.5984
8	10-1-2022	12-31-2022	1.6034	1.6034
9	1-1-2023	3-31-2023	1.3586	1.3586
10	4-1-2023	6-30-2023	1.3709	1.3709
11	7-1-2023	9-30-2023	1.3859	1.3859
12	10-1-2023	12-31-2023	1.5183	1.5183
13	1-1-2024	3-31-2024	1.5689	1.5689
14	4-1-2024	6-30-2024	1.5370	1.5370
15	7-1-2024	9-30-2024	1.5539	1.5539
16	10-1-2024	12-31-2024	1.5861	1.5861
17	1-1-2025	3-31-2025	1.4874	1.4874
18	4-1-2025	6-30-2025	1.4746	1.4746
19	7-1-2025	9-30-2025	1.4908	1.4908
20	10-1-2025	12-31-2025	1.5204	1.5204
21	1-1-2026	3-31-2026	1.4607	1.4607
22	4-1-2026	6-30-2026	1.4496	1.4496
23	7-1-2026	9-30-2026	1.4656	1.4656
24	10-1-2026	12-31-2026	1.4932	1.4932
25	1-1-2027	3-31-2027	1.4354	1.4354
26	4-1-2027	6-30-2027	1.4260	1.4260

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27	7-1-2027	9-30-2027	1.2701	1.2701
28	10-1-2027	12-31-2027	0.3145	0.3145
29	1-1-2028	3-31-2028	0.3109	0.3109
30	4-1-2028	6-30-2028	0.3106	0.3106
31	7-1-2028	9-30-2028	0.3140	0.3140
32	10-1-2028	12-31-2028	4.8464	4.8464
33	1-1-2029	3-31-2029	8.1488	8.1488
34	4-1-2029	6-30-2029	8.2359	8.2359
35	7-1-2029	9-30-2029	8.3264	8.3264
36	10-1-2029	12-31-2029	8.3299	8.3299
37	1-1-2030	3-31-2030	0.2712	0.2712
		Highest	8.3299	8.3299

Rezoning Sites for Housing Project - Sonoma County - GHG Analysis - Sonoma-San Francisco County, Annual

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	42.8889	0.6398	47.6349	0.0537		3.7989	3.7989		3.7989	3.7989	378.1552	128.9324	507.0876	0.7495	0.0216	532.2658
Energy	0.4663	3.9843	1.6955	0.0254		0.3221	0.3221		0.3221	0.3221	0.0000	9,828.5977	9,828.5977	0.3286	0.1392	9,878.2903
Mobile	4.9629	24.7554	55.1400	0.1614	12.6974	0.1687	12.8662	3.4172	0.1585	3.5757	0.0000	14,828.9345	14,828.9345	0.6650	0.0000	14,845.5600
Waste						0.0000	0.0000		0.0000	0.0000	725.4450	0.0000	725.4450	42.8726	0.0000	1,797.2594
Water						0.0000	0.0000		0.0000	0.0000	61.4943	319.8689	381.3632	6.3308	0.1525	585.0734
Total	48.3180	29.3796	104.4704	0.2406	12.6974	4.2898	16.9872	3.4172	4.2795	7.6967	1,165.0946	25,106.3335	26,271.4280	50.9465	0.3133	27,638.4488

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	42.8889	0.6398	47.6349	0.0537		3.7989	3.7989		3.7989	3.7989	378.1552	128.9324	507.0876	0.7495	0.0216	532.2658
Energy	0.4663	3.9843	1.6955	0.0254		0.3221	0.3221		0.3221	0.3221	0.0000	8,215.5314	8,215.5314	0.2543	0.1223	8,258.3340
Mobile	4.9629	24.7554	55.1400	0.1614	12.6974	0.1687	12.8662	3.4172	0.1585	3.5757	0.0000	14,828.9345	14,828.9345	0.6650	0.0000	14,845.5600
Waste						0.0000	0.0000		0.0000	0.0000	725.4450	0.0000	725.4450	42.8726	0.0000	1,797.2594
Water						0.0000	0.0000		0.0000	0.0000	49.1955	274.4260	323.6215	5.0655	0.1222	486.6688
Total	48.3180	29.3796	104.4704	0.2406	12.6974	4.2898	16.9872	3.4172	4.2795	7.6967	1,152.7957	23,447.8243	24,600.6200	49.6069	0.2661	25,920.0879

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	6.61	6.36	2.63	15.06	6.22

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	7/29/2021	5	150	
2	Site Preparation	Site Preparation	7/30/2021	2/24/2022	5	150	
3	Grading	Grading	2/25/2022	11/16/2023	5	450	
4	Building Construction	Building Construction	11/17/2023	9/16/2027	5	1000	
5	Paving	Paving	9/17/2027	11/9/2028	5	300	
6	Architectural Coating	Architectural Coating	11/10/2028	1/3/2030	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1125

Acres of Paving: 0

Residential Indoor: 10,843,875; Residential Outdoor: 3,614,625; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	3,411.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	10,800.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,071.00	318.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	214.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3691	0.0000	0.3691	0.0559	0.0000	0.0559	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2374	2.3581	1.6174	2.9100e-003		0.1164	0.1164		0.1081	0.1081	0.0000	255.0059	255.0059	0.0718	0.0000	256.8002
Total	0.2374	2.3581	1.6174	2.9100e-003	0.3691	0.1164	0.4855	0.0559	0.1081	0.1640	0.0000	255.0059	255.0059	0.0718	0.0000	256.8002

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3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0128	0.4636	0.0986	1.3300e-003	0.0283	1.5800e-003	0.0299	7.7500e-003	1.5100e-003	9.2600e-003	0.0000	129.6649	129.6649	7.9800e-003	0.0000	129.8644
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9700e-003	3.4700e-003	0.0355	9.0000e-005	8.8300e-003	7.0000e-005	8.9000e-003	2.3500e-003	6.0000e-005	2.4100e-003	0.0000	7.8520	7.8520	2.7000e-004	0.0000	7.8586
Total	0.0178	0.4670	0.1340	1.4200e-003	0.0371	1.6500e-003	0.0388	0.0101	1.5700e-003	0.0117	0.0000	137.5168	137.5168	8.2500e-003	0.0000	137.7230

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1661	0.0000	0.1661	0.0252	0.0000	0.0252	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2374	2.3581	1.6174	2.9100e-003		0.1164	0.1164		0.1081	0.1081	0.0000	255.0056	255.0056	0.0718	0.0000	256.7999
Total	0.2374	2.3581	1.6174	2.9100e-003	0.1661	0.1164	0.2825	0.0252	0.1081	0.1332	0.0000	255.0056	255.0056	0.0718	0.0000	256.7999

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3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0128	0.4636	0.0986	1.3300e-003	0.0283	1.5800e-003	0.0299	7.7500e-003	1.5100e-003	9.2600e-003	0.0000	129.6649	129.6649	7.9800e-003	0.0000	129.8644
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9700e-003	3.4700e-003	0.0355	9.0000e-005	8.8300e-003	7.0000e-005	8.9000e-003	2.3500e-003	6.0000e-005	2.4100e-003	0.0000	7.8520	7.8520	2.7000e-004	0.0000	7.8586
Total	0.0178	0.4670	0.1340	1.4200e-003	0.0371	1.6500e-003	0.0388	0.0101	1.5700e-003	0.0117	0.0000	137.5168	137.5168	8.2500e-003	0.0000	137.7230

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0027	0.0000	1.0027	0.5512	0.0000	0.5512	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2158	2.2476	1.1741	2.1100e-003		0.1135	0.1135		0.1044	0.1044	0.0000	185.5682	185.5682	0.0600	0.0000	187.0686
Total	0.2158	2.2476	1.1741	2.1100e-003	1.0027	0.1135	1.1162	0.5512	0.1044	0.6555	0.0000	185.5682	185.5682	0.0600	0.0000	187.0686

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4200e-003	3.0900e-003	0.0315	8.0000e-005	7.8400e-003	6.0000e-005	7.9000e-003	2.0900e-003	6.0000e-005	2.1400e-003	0.0000	6.9726	6.9726	2.4000e-004	0.0000	6.9784
Total	4.4200e-003	3.0900e-003	0.0315	8.0000e-005	7.8400e-003	6.0000e-005	7.9000e-003	2.0900e-003	6.0000e-005	2.1400e-003	0.0000	6.9726	6.9726	2.4000e-004	0.0000	6.9784

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4512	0.0000	0.4512	0.2480	0.0000	0.2480	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2158	2.2476	1.1741	2.1100e-003		0.1135	0.1135		0.1044	0.1044	0.0000	185.5680	185.5680	0.0600	0.0000	187.0684
Total	0.2158	2.2476	1.1741	2.1100e-003	0.4512	0.1135	0.5647	0.2480	0.1044	0.3524	0.0000	185.5680	185.5680	0.0600	0.0000	187.0684

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4200e-003	3.0900e-003	0.0315	8.0000e-005	7.8400e-003	6.0000e-005	7.9000e-003	2.0900e-003	6.0000e-005	2.1400e-003	0.0000	6.9726	6.9726	2.4000e-004	0.0000	6.9784
Total	4.4200e-003	3.0900e-003	0.0315	8.0000e-005	7.8400e-003	6.0000e-005	7.9000e-003	2.0900e-003	6.0000e-005	2.1400e-003	0.0000	6.9726	6.9726	2.4000e-004	0.0000	6.9784

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3523	0.0000	0.3523	0.1937	0.0000	0.1937	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0618	0.6451	0.3841	7.4000e-004		0.0315	0.0315		0.0289	0.0289	0.0000	65.2068	65.2068	0.0211	0.0000	65.7340
Total	0.0618	0.6451	0.3841	7.4000e-004	0.3523	0.0315	0.3837	0.1937	0.0289	0.2226	0.0000	65.2068	65.2068	0.0211	0.0000	65.7340

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3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4400e-003	9.6000e-004	9.9100e-003	3.0000e-005	2.7500e-003	2.0000e-005	2.7800e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.3602	2.3602	7.0000e-005	0.0000	2.3620
Total	1.4400e-003	9.6000e-004	9.9100e-003	3.0000e-005	2.7500e-003	2.0000e-005	2.7800e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.3602	2.3602	7.0000e-005	0.0000	2.3620

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1585	0.0000	0.1585	0.0871	0.0000	0.0871	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0618	0.6451	0.3841	7.4000e-004		0.0315	0.0315		0.0289	0.0289	0.0000	65.2067	65.2067	0.0211	0.0000	65.7340
Total	0.0618	0.6451	0.3841	7.4000e-004	0.1585	0.0315	0.1900	0.0871	0.0289	0.1161	0.0000	65.2067	65.2067	0.0211	0.0000	65.7340

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3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4400e-003	9.6000e-004	9.9100e-003	3.0000e-005	2.7500e-003	2.0000e-005	2.7800e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.3602	2.3602	7.0000e-005	0.0000	2.3620
Total	1.4400e-003	9.6000e-004	9.9100e-003	3.0000e-005	2.7500e-003	2.0000e-005	2.7800e-003	7.3000e-004	2.0000e-005	7.5000e-004	0.0000	2.3602	2.3602	7.0000e-005	0.0000	2.3620

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2669	0.0000	1.2669	0.4309	0.0000	0.4309	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4005	4.2922	3.2091	6.8600e-003		0.1807	0.1807		0.1662	0.1662	0.0000	602.6073	602.6073	0.1949	0.0000	607.4797
Total	0.4005	4.2922	3.2091	6.8600e-003	1.2669	0.1807	1.4475	0.4309	0.1662	0.5971	0.0000	602.6073	602.6073	0.1949	0.0000	607.4797

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0187	0.6604	0.1473	2.0300e-003	0.0784	2.1100e-003	0.0805	0.0205	2.0100e-003	0.0225	0.0000	198.8723	198.8723	0.0123	0.0000	199.1793
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0500e-003	6.0600e-003	0.0624	1.6000e-004	0.0173	1.3000e-004	0.0175	4.6200e-003	1.2000e-004	4.7400e-003	0.0000	14.8604	14.8604	4.6000e-004	0.0000	14.8719
Total	0.0278	0.6664	0.2097	2.1900e-003	0.0958	2.2400e-003	0.0980	0.0251	2.1300e-003	0.0273	0.0000	213.7327	213.7327	0.0127	0.0000	214.0511

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5701	0.0000	0.5701	0.1939	0.0000	0.1939	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4005	4.2922	3.2091	6.8600e-003		0.1807	0.1807		0.1662	0.1662	0.0000	602.6066	602.6066	0.1949	0.0000	607.4790
Total	0.4005	4.2922	3.2091	6.8600e-003	0.5701	0.1807	0.7507	0.1939	0.1662	0.3601	0.0000	602.6066	602.6066	0.1949	0.0000	607.4790

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0187	0.6604	0.1473	2.0300e-003	0.0784	2.1100e-003	0.0805	0.0205	2.0100e-003	0.0225	0.0000	198.8723	198.8723	0.0123	0.0000	199.1793
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0500e-003	6.0600e-003	0.0624	1.6000e-004	0.0173	1.3000e-004	0.0175	4.6200e-003	1.2000e-004	4.7400e-003	0.0000	14.8604	14.8604	4.6000e-004	0.0000	14.8719
Total	0.0278	0.6664	0.2097	2.1900e-003	0.0958	2.2400e-003	0.0980	0.0251	2.1300e-003	0.0273	0.0000	213.7327	213.7327	0.0127	0.0000	214.0511

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2910	0.0000	1.2910	0.4442	0.0000	0.4442	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3803	3.9520	3.2119	7.1100e-003		0.1631	0.1631		0.1501	0.1501	0.0000	624.4281	624.4281	0.2020	0.0000	629.4770
Total	0.3803	3.9520	3.2119	7.1100e-003	1.2910	0.1631	1.4541	0.4442	0.1501	0.5942	0.0000	624.4281	624.4281	0.2020	0.0000	629.4770

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3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0137	0.4760	0.1393	2.0400e-003	0.0788	9.5000e-004	0.0798	0.0206	9.1000e-004	0.0216	0.0000	199.4761	199.4761	0.0118	0.0000	199.7702
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-003	5.6000e-003	0.0582	1.6000e-004	0.0180	1.3000e-004	0.0181	4.7800e-003	1.2000e-004	4.9000e-003	0.0000	14.8057	14.8057	4.2000e-004	0.0000	14.8162
Total	0.0224	0.4816	0.1975	2.2000e-003	0.0968	1.0800e-003	0.0979	0.0254	1.0300e-003	0.0265	0.0000	214.2819	214.2819	0.0122	0.0000	214.5865

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5809	0.0000	0.5809	0.1999	0.0000	0.1999	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3803	3.9520	3.2119	7.1100e-003		0.1631	0.1631		0.1501	0.1501	0.0000	624.4274	624.4274	0.2020	0.0000	629.4762
Total	0.3803	3.9520	3.2119	7.1100e-003	0.5809	0.1631	0.7440	0.1999	0.1501	0.3499	0.0000	624.4274	624.4274	0.2020	0.0000	629.4762

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3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0137	0.4760	0.1393	2.0400e-003	0.0788	9.5000e-004	0.0798	0.0206	9.1000e-004	0.0216	0.0000	199.4761	199.4761	0.0118	0.0000	199.7702
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-003	5.6000e-003	0.0582	1.6000e-004	0.0180	1.3000e-004	0.0181	4.7800e-003	1.2000e-004	4.9000e-003	0.0000	14.8057	14.8057	4.2000e-004	0.0000	14.8162
Total	0.0224	0.4816	0.1975	2.2000e-003	0.0968	1.0800e-003	0.0979	0.0254	1.0300e-003	0.0265	0.0000	214.2819	214.2819	0.0122	0.0000	214.5865

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0244	0.2230	0.2518	4.2000e-004		0.0109	0.0109		0.0102	0.0102	0.0000	35.9297	35.9297	8.5500e-003	0.0000	36.1434
Total	0.0244	0.2230	0.2518	4.2000e-004		0.0109	0.0109		0.0102	0.0102	0.0000	35.9297	35.9297	8.5500e-003	0.0000	36.1434

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0109	0.4072	0.1068	1.2600e-003	0.0320	5.1000e-004	0.0325	9.2300e-003	4.9000e-004	9.7200e-003	0.0000	121.7621	121.7621	6.4300e-003	0.0000	121.9229
Worker	0.0631	0.0406	0.4217	1.1900e-003	0.1303	9.4000e-004	0.1312	0.0347	8.7000e-004	0.0356	0.0000	107.3285	107.3285	3.0500e-003	0.0000	107.4046
Total	0.0740	0.4478	0.5285	2.4500e-003	0.1622	1.4500e-003	0.1637	0.0439	1.3600e-003	0.0453	0.0000	229.0906	229.0906	9.4800e-003	0.0000	229.3275

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0244	0.2230	0.2518	4.2000e-004		0.0109	0.0109		0.0102	0.0102	0.0000	35.9297	35.9297	8.5500e-003	0.0000	36.1434
Total	0.0244	0.2230	0.2518	4.2000e-004		0.0109	0.0109		0.0102	0.0102	0.0000	35.9297	35.9297	8.5500e-003	0.0000	36.1434

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0109	0.4072	0.1068	1.2600e-003	0.0320	5.1000e-004	0.0325	9.2300e-003	4.9000e-004	9.7200e-003	0.0000	121.7621	121.7621	6.4300e-003	0.0000	121.9229
Worker	0.0631	0.0406	0.4217	1.1900e-003	0.1303	9.4000e-004	0.1312	0.0347	8.7000e-004	0.0356	0.0000	107.3285	107.3285	3.0500e-003	0.0000	107.4046
Total	0.0740	0.4478	0.5285	2.4500e-003	0.1622	1.4500e-003	0.1637	0.0439	1.3600e-003	0.0453	0.0000	229.0906	229.0906	9.4800e-003	0.0000	229.3275

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179

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3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0884	3.3958	0.8531	0.0106	0.2700	4.1300e-003	0.2741	0.0780	3.9500e-003	0.0820	0.0000	1,022.6468	1,022.6468	0.0537	0.0000	1,023.9901
Worker	0.4949	0.3060	3.2367	9.6300e-003	1.1011	7.7000e-003	1.1088	0.2931	7.1000e-003	0.3002	0.0000	870.7887	870.7887	0.0227	0.0000	871.3551
Total	0.5833	3.7018	4.0898	0.0202	1.3711	0.0118	1.3829	0.3711	0.0111	0.3821	0.0000	1,893.4355	1,893.4355	0.0764	0.0000	1,895.3453

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175

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3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0884	3.3958	0.8531	0.0106	0.2700	4.1300e-003	0.2741	0.0780	3.9500e-003	0.0820	0.0000	1,022.6468	1,022.6468	0.0537	0.0000	1,023.9901
Worker	0.4949	0.3060	3.2367	9.6300e-003	1.1011	7.7000e-003	1.1088	0.2931	7.1000e-003	0.3002	0.0000	870.7887	870.7887	0.0227	0.0000	871.3551
Total	0.5833	3.7018	4.0898	0.0202	1.3711	0.0118	1.3829	0.3711	0.0111	0.3821	0.0000	1,893.4355	1,893.4355	0.0764	0.0000	1,895.3453

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0848	3.3372	0.8133	0.0105	0.2689	3.9600e-003	0.2729	0.0777	3.7900e-003	0.0815	0.0000	1,012.4926	1,012.4926	0.0529	0.0000	1,013.8159
Worker	0.4590	0.2743	2.9493	9.2000e-003	1.0969	7.4800e-003	1.1044	0.2920	6.8900e-003	0.2989	0.0000	831.7436	831.7436	0.0201	0.0000	832.2470
Total	0.5438	3.6115	3.7626	0.0197	1.3658	0.0114	1.3772	0.3697	0.0107	0.3804	0.0000	1,844.2361	1,844.2361	0.0731	0.0000	1,846.0629

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0848	3.3372	0.8133	0.0105	0.2689	3.9600e-003	0.2729	0.0777	3.7900e-003	0.0815	0.0000	1,012.4926	1,012.4926	0.0529	0.0000	1,013.8159
Worker	0.4590	0.2743	2.9493	9.2000e-003	1.0969	7.4800e-003	1.1044	0.2920	6.8900e-003	0.2989	0.0000	831.7436	831.7436	0.0201	0.0000	832.2470
Total	0.5438	3.6115	3.7626	0.0197	1.3658	0.0114	1.3772	0.3697	0.0107	0.3804	0.0000	1,844.2361	1,844.2361	0.0731	0.0000	1,846.0629

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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3.5 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0821	3.2926	0.7860	0.0104	0.2689	3.8000e-003	0.2727	0.0777	3.6300e-003	0.0814	0.0000	1,006.6931	1,006.6931	0.0523	0.0000	1,007.9992
Worker	0.4295	0.2485	2.7143	8.8400e-003	1.0969	7.2100e-003	1.1041	0.2920	6.6400e-003	0.2986	0.0000	799.8271	799.8271	0.0181	0.0000	800.2783
Total	0.5116	3.5411	3.5003	0.0192	1.3658	0.0110	1.3768	0.3697	0.0103	0.3800	0.0000	1,806.5201	1,806.5201	0.0703	0.0000	1,808.2775

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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3.5 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0821	3.2926	0.7860	0.0104	0.2689	3.8000e-003	0.2727	0.0777	3.6300e-003	0.0814	0.0000	1,006.6931	1,006.6931	0.0523	0.0000	1,007.9992
Worker	0.4295	0.2485	2.7143	8.8400e-003	1.0969	7.2100e-003	1.1041	0.2920	6.6400e-003	0.2986	0.0000	799.8271	799.8271	0.0181	0.0000	800.2783
Total	0.5116	3.5411	3.5003	0.0192	1.3658	0.0110	1.3768	0.3697	0.0103	0.3800	0.0000	1,806.5201	1,806.5201	0.0703	0.0000	1,808.2775

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1265	1.1535	1.4878	2.4900e-003		0.0488	0.0488		0.0459	0.0459	0.0000	214.5255	214.5255	0.0504	0.0000	215.7862
Total	0.1265	1.1535	1.4878	2.4900e-003		0.0488	0.0488		0.0459	0.0459	0.0000	214.5255	214.5255	0.0504	0.0000	215.7862

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3.5 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0565	2.3035	0.5406	7.3100e-003	0.1906	2.6000e-003	0.1932	0.0551	2.4900e-003	0.0576	0.0000	709.6427	709.6427	0.0366	0.0000	710.5571
Worker	0.2841	0.1595	1.7739	6.0500e-003	0.7775	4.8100e-003	0.7823	0.2069	4.4300e-003	0.2114	0.0000	546.9450	546.9450	0.0115	0.0000	547.2319
Total	0.3406	2.4630	2.3145	0.0134	0.9681	7.4100e-003	0.9755	0.2620	6.9200e-003	0.2689	0.0000	1,256.5877	1,256.5877	0.0481	0.0000	1,257.7890

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1265	1.1534	1.4878	2.4900e-003		0.0488	0.0488		0.0459	0.0459	0.0000	214.5252	214.5252	0.0504	0.0000	215.7860
Total	0.1265	1.1534	1.4878	2.4900e-003		0.0488	0.0488		0.0459	0.0459	0.0000	214.5252	214.5252	0.0504	0.0000	215.7860

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3.5 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0565	2.3035	0.5406	7.3100e-003	0.1906	2.6000e-003	0.1932	0.0551	2.4900e-003	0.0576	0.0000	709.6427	709.6427	0.0366	0.0000	710.5571
Worker	0.2841	0.1595	1.7739	6.0500e-003	0.7775	4.8100e-003	0.7823	0.2069	4.4300e-003	0.2114	0.0000	546.9450	546.9450	0.0115	0.0000	547.2319
Total	0.3406	2.4630	2.3145	0.0134	0.9681	7.4100e-003	0.9755	0.2620	6.9200e-003	0.2689	0.0000	1,256.5877	1,256.5877	0.0481	0.0000	1,257.7890

3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0348	0.3261	0.5540	8.7000e-004		0.0159	0.0159		0.0146	0.0146	0.0000	76.0732	76.0732	0.0246	0.0000	76.6883
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0348	0.3261	0.5540	8.7000e-004		0.0159	0.0159		0.0146	0.0146	0.0000	76.0732	76.0732	0.0246	0.0000	76.6883

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3.6 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6300e-003	9.2000e-004	0.0102	3.0000e-005	4.4700e-003	3.0000e-005	4.5000e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	3.1469	3.1469	7.0000e-005	0.0000	3.1486
Total	1.6300e-003	9.2000e-004	0.0102	3.0000e-005	4.4700e-003	3.0000e-005	4.5000e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	3.1469	3.1469	7.0000e-005	0.0000	3.1486

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0348	0.3261	0.5540	8.7000e-004		0.0159	0.0159		0.0146	0.0146	0.0000	76.0731	76.0731	0.0246	0.0000	76.6882
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0348	0.3261	0.5540	8.7000e-004		0.0159	0.0159		0.0146	0.0146	0.0000	76.0731	76.0731	0.0246	0.0000	76.6882

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3.6 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6300e-003	9.2000e-004	0.0102	3.0000e-005	4.4700e-003	3.0000e-005	4.5000e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	3.1469	3.1469	7.0000e-005	0.0000	3.1486
Total	1.6300e-003	9.2000e-004	0.0102	3.0000e-005	4.4700e-003	3.0000e-005	4.5000e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	3.1469	3.1469	7.0000e-005	0.0000	3.1486

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1025	0.9611	1.6327	2.5500e-003		0.0469	0.0469		0.0431	0.0431	0.0000	224.2157	224.2157	0.0725	0.0000	226.0286
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1025	0.9611	1.6327	2.5500e-003		0.0469	0.0469		0.0431	0.0431	0.0000	224.2157	224.2157	0.0725	0.0000	226.0286

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3.6 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4700e-003	2.4500e-003	0.0279	1.0000e-004	0.0132	8.0000e-005	0.0133	3.5100e-003	7.0000e-005	3.5800e-003	0.0000	8.9753	8.9753	1.8000e-004	0.0000	8.9797
Total	4.4700e-003	2.4500e-003	0.0279	1.0000e-004	0.0132	8.0000e-005	0.0133	3.5100e-003	7.0000e-005	3.5800e-003	0.0000	8.9753	8.9753	1.8000e-004	0.0000	8.9797

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1025	0.9611	1.6327	2.5500e-003		0.0469	0.0469		0.0431	0.0431	0.0000	224.2154	224.2154	0.0725	0.0000	226.0283
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1025	0.9611	1.6327	2.5500e-003		0.0469	0.0469		0.0431	0.0431	0.0000	224.2154	224.2154	0.0725	0.0000	226.0283

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3.6 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4700e-003	2.4500e-003	0.0279	1.0000e-004	0.0132	8.0000e-005	0.0133	3.5100e-003	7.0000e-005	3.5800e-003	0.0000	8.9753	8.9753	1.8000e-004	0.0000	8.9797
Total	4.4700e-003	2.4500e-003	0.0279	1.0000e-004	0.0132	8.0000e-005	0.0133	3.5100e-003	7.0000e-005	3.5800e-003	0.0000	8.9753	8.9753	1.8000e-004	0.0000	8.9797

3.7 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.5235					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0800e-003	0.0206	0.0326	5.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	4.5959	4.5959	2.5000e-004	0.0000	4.6021
Total	4.5266	0.0206	0.0326	5.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	4.5959	4.5959	2.5000e-004	0.0000	4.6021

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3.7 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0103	5.6200e-003	0.0640	2.3000e-004	0.0302	1.7000e-004	0.0304	8.0500e-003	1.6000e-004	8.2100e-003	0.0000	20.5790	20.5790	4.0000e-004	0.0000	20.5891
Total	0.0103	5.6200e-003	0.0640	2.3000e-004	0.0302	1.7000e-004	0.0304	8.0500e-003	1.6000e-004	8.2100e-003	0.0000	20.5790	20.5790	4.0000e-004	0.0000	20.5891

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.5235					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0800e-003	0.0206	0.0326	5.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	4.5959	4.5959	2.5000e-004	0.0000	4.6021
Total	4.5266	0.0206	0.0326	5.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	4.5959	4.5959	2.5000e-004	0.0000	4.6021

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3.7 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0103	5.6200e-003	0.0640	2.3000e-004	0.0302	1.7000e-004	0.0304	8.0500e-003	1.6000e-004	8.2100e-003	0.0000	20.5790	20.5790	4.0000e-004	0.0000	20.5891
Total	0.0103	5.6200e-003	0.0640	2.3000e-004	0.0302	1.7000e-004	0.0304	8.0500e-003	1.6000e-004	8.2100e-003	0.0000	20.5790	20.5790	4.0000e-004	0.0000	20.5891

3.7 Architectural Coating - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	32.7955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
Total	32.8178	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654

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3.7 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0683	0.0369	0.4291	1.6000e-003	0.2192	1.1700e-003	0.2203	0.0583	1.0700e-003	0.0594	0.0000	144.7873	144.7873	2.6300e-003	0.0000	144.8530
Total	0.0683	0.0369	0.4291	1.6000e-003	0.2192	1.1700e-003	0.2203	0.0583	1.0700e-003	0.0594	0.0000	144.7873	144.7873	2.6300e-003	0.0000	144.8530

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	32.7955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	32.8178	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654

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3.7 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0683	0.0369	0.4291	1.6000e-003	0.2192	1.1700e-003	0.2203	0.0583	1.0700e-003	0.0594	0.0000	144.7873	144.7873	2.6300e-003	0.0000	144.8530
Total	0.0683	0.0369	0.4291	1.6000e-003	0.2192	1.1700e-003	0.2203	0.0583	1.0700e-003	0.0594	0.0000	144.7873	144.7873	2.6300e-003	0.0000	144.8530

3.7 Architectural Coating - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3770					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-004	1.2800e-003	2.7000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3830	0.3830	2.0000e-005	0.0000	0.3834
Total	0.3772	1.2800e-003	2.7000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3830	0.3830	2.0000e-005	0.0000	0.3834

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3.7 Architectural Coating - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	3.8000e-004	4.5800e-003	2.0000e-005	2.5200e-003	1.0000e-005	2.5300e-003	6.7000e-004	1.0000e-005	6.8000e-004	0.0000	1.6196	1.6196	3.0000e-005	0.0000	1.6202
Total	7.2000e-004	3.8000e-004	4.5800e-003	2.0000e-005	2.5200e-003	1.0000e-005	2.5300e-003	6.7000e-004	1.0000e-005	6.8000e-004	0.0000	1.6196	1.6196	3.0000e-005	0.0000	1.6202

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3770					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-004	1.2800e-003	2.7000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3830	0.3830	2.0000e-005	0.0000	0.3834
Total	0.3772	1.2800e-003	2.7000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3830	0.3830	2.0000e-005	0.0000	0.3834

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3.7 Architectural Coating - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	3.8000e-004	4.5800e-003	2.0000e-005	2.5200e-003	1.0000e-005	2.5300e-003	6.7000e-004	1.0000e-005	6.8000e-004	0.0000	1.6196	1.6196	3.0000e-005	0.0000	1.6202
Total	7.2000e-004	3.8000e-004	4.5800e-003	2.0000e-005	2.5200e-003	1.0000e-005	2.5300e-003	6.7000e-004	1.0000e-005	6.8000e-004	0.0000	1.6196	1.6196	3.0000e-005	0.0000	1.6202

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.9629	24.7554	55.1400	0.1614	12.6974	0.1687	12.8662	3.4172	0.1585	3.5757	0.0000	14,828.9345	14,828.9345	0.6650	0.0000	14,845.5600
Unmitigated	4.9629	24.7554	55.1400	0.1614	12.6974	0.1687	12.8662	3.4172	0.1585	3.5757	0.0000	14,828.9345	14,828.9345	0.6650	0.0000	14,845.5600

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	14,815.50	14,815.50	14,815.50	34,217,987	34,217,987
Total	14,815.50	14,815.50	14,815.50	34,217,987	34,217,987

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.578299	0.039453	0.169996	0.109068	0.028307	0.006716	0.029274	0.026666	0.003071	0.001838	0.005325	0.000874	0.001112

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,601.2353	3,601.2353	0.1659	0.0377	3,616.6175
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,214.3016	5,214.3016	0.2402	0.0546	5,236.5738
NaturalGas Mitigated	0.4663	3.9843	1.6955	0.0254		0.3221	0.3221		0.3221	0.3221	0.0000	4,614.2961	4,614.2961	0.0884	0.0846	4,641.7165
NaturalGas Unmitigated	0.4663	3.9843	1.6955	0.0254		0.3221	0.3221		0.3221	0.3221	0.0000	4,614.2961	4,614.2961	0.0884	0.0846	4,641.7165

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	8.64686e+007	0.4663	3.9843	1.6955	0.0254		0.3221	0.3221		0.3221	0.3221	0.0000	4,614.2961	4,614.2961	0.0884	0.0846	4,641.7165
Total		0.4663	3.9843	1.6955	0.0254		0.3221	0.3221		0.3221	0.3221	0.0000	4,614.2961	4,614.2961	0.0884	0.0846	4,641.7165

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	8.64686e+007	0.4663	3.9843	1.6955	0.0254		0.3221	0.3221		0.3221	0.3221	0.0000	4,614.2961	4,614.2961	0.0884	0.0846	4,641.7165
Total		0.4663	3.9843	1.6955	0.0254		0.3221	0.3221		0.3221	0.3221	0.0000	4,614.2961	4,614.2961	0.0884	0.0846	4,641.7165

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	2.40694e+007	5,214.3016	0.2402	0.0546	5,236.5738
Total		5,214.3016	0.2402	0.0546	5,236.5738

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.66235e+007	3,601.2353	0.1659	0.0377	3,616.6175
Total		3,601.2353	0.1659	0.0377	3,616.6175

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	42.8889	0.6398	47.6349	0.0537		3.7989	3.7989		3.7989	3.7989	378.1552	128.9324	507.0876	0.7495	0.0216	532.2658
Unmitigated	42.8889	0.6398	47.6349	0.0537		3.7989	3.7989		3.7989	3.7989	378.1552	128.9324	507.0876	0.7495	0.0216	532.2658

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.7696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	20.9140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	17.5346	0.3843	25.4972	0.0526		3.6769	3.6769		3.6769	3.6769	378.1552	92.8492	471.0044	0.7145	0.0216	495.3084
Landscaping	0.6707	0.2555	22.1377	1.1700e-003		0.1220	0.1220		0.1220	0.1220	0.0000	36.0832	36.0832	0.0350	0.0000	36.9574
Total	42.8889	0.6398	47.6349	0.0537		3.7989	3.7989		3.7989	3.7989	378.1552	128.9324	507.0876	0.7495	0.0216	532.2658

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.7696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	20.9140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	17.5346	0.3843	25.4972	0.0526		3.6769	3.6769		3.6769	3.6769	378.1552	92.8492	471.0044	0.7145	0.0216	495.3084
Landscaping	0.6707	0.2555	22.1377	1.1700e-003		0.1220	0.1220		0.1220	0.1220	0.0000	36.0832	36.0832	0.0350	0.0000	36.9574
Total	42.8889	0.6398	47.6349	0.0537		3.7989	3.7989		3.7989	3.7989	378.1552	128.9324	507.0876	0.7495	0.0216	532.2658

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	323.6215	5.0655	0.1222	486.6688
Unmitigated	381.3632	6.3308	0.1525	585.0734

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	193.833 / 122.199	381.3632	6.3308	0.1525	585.0734
Total		381.3632	6.3308	0.1525	585.0734

Rezoning Sites for Housing Project - Sonoma County - GHG Analysis - Sonoma-San Francisco County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	155.067 / 122.199	323.6215	5.0655	0.1222	486.6688
Total		323.6215	5.0655	0.1222	486.6688

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	725.4450	42.8726	0.0000	1,797.2594
Unmitigated	725.4450	42.8726	0.0000	1,797.2594

Rezoning Sites for Housing Project - Sonoma County - GHG Analysis - Sonoma-San Francisco County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	3573.78	725.4450	42.8726	0.0000	1,797.2594
Total		725.4450	42.8726	0.0000	1,797.2594

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	3573.78	725.4450	42.8726	0.0000	1,797.2594
Total		725.4450	42.8726	0.0000	1,797.2594

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Rezoning Sites for Housing Project - Sonoma County - GHG Analysis - Sonoma-San Francisco County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation
