Appendix A

Air Quality, Greenhouse Gases Emissions, and Energy Modeling Calculations

CalEEMod Construction Phase Inputs*

5-Day Work Week/8 hours per day

CalEEMod Default

Phase Name	Phase Type	Start Date	End Date	CalEEMod Total Days	Portion of Construction Schedule	Portion of Construction Schedule for 12 month phase	Check
Site Preparation	Site Preparation	4/1/2021	4/14/2021	10	3%	9	3%
Grading	Grading	4/15/2021	5/12/2021	20	7%	17	7%
Building Construction	Building Construction	5/13/2021	3/30/3022	230	77%	199	77%
Paving	Paving	3/31/2022	4/27/2022	20	7%	17	7%
Architectural Coating	Architectural Coating	4/28/2022	5/25/2022	20	7%	17	7%
				300	100%	260	100%

Adjusted Phasing for 12 month phasing

Phase Name	Phase Type	Start Date	End Date	CalEEMod Total Days	Check	
Site Preparation	Site Preparation	4/1/2021	4/13/2021	9	3%	
Grading	Grading	4/14/2021	5/6/2021	17	7%	16
Building Construction	Building Construction	5/7/2021	2/9/2022	199	77%	
Paving	Paving	2/10/2022	3/4/2022	17	7%	
Architectural Coating	Architectural Coating	3/7/2022	3/29/2022	17	7%	
				259	100%	

*Based on overall construction schedule of 24 months provided by the Applicant, CalEEMod default phase lengths were normalized to meet 24 month period

Trip Rate Calculator

			Weekday				
Vehicle Trips Land Use Sub Type	Vehicle Trips Land Use Size Metric	Land Use Unit Amount	CalEEMod Default Trip Rate	ADT	Portion of Total Trips	Adjusted ADT	**Adjusted Trip Rate**
Bank (with Drive Through)	1000sqft	3.83	148.15	567.41	7%	627	**163.58**
Day-Care Center	1000sqft	12.07	74.06	893.90	11%	987	**81.77**
Fast Food Restaurant (with Drive Throu	1000sqft	8	496.12	3,968.96	50%	4,382	**547.80**
Health Club	1000sqft	38.3	32.93	1,261.22	16%	1,393	**36.36**
High Turnover (Sit-Down Restaurant)	1000sqft	7.5	127.15	953.63	12%	1,053	**140.40**
Parking Lot	Spaces	623	0	0.00	0%	0	**0.00**
Strip Mall	1000sqft	8	44.32	354.56	4%	391	**48.94**
				7,999.68		8,833	

DKS Traffic Study Weekday ADT 8,833

Saturday					Sunday				
CalEEMod Default Trip Rate	ADT	Portion of Total Trips	Adjusted ADT	**Adjusted Trip Rate**	CalEEMod Default Trip Rate	ADT	Portion of Total Trips	Adjusted ADT	**Adjusted Trip Rate**
86.32	330.61	4%	343	**89.65**	31.9	122.18	2%	161	**41.99**
6.21	74.95	1%	78	**6.45**	5.83	70.37	1%	93	**7.67**
722.03	5,776.24	68%	5,999	**749.86**	542.72	4,341.76	65%	5,715	**714.40**
20.87	799.32	9%	830	**21.67**	26.73	1,023.76	15%	1,348	**35.19**
158.37	1,187.78	14%	1,234	**164.47**	131.84	988.80	15%	1,302	**173.55**
0	0.00	0%	0	**0.00**	0	0.00	0%	0	**0.00**
42.04	336.32	4%	349	**43.66**	20.43	163.44	2%	215	**26.89**
	8,505.22		8,833			6,710.30		8,833	

Natomas Town Center East

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	3.83	1000sqft	0.09	3,830.00	0
Day-Care Center	12.07	1000sqft	0.28	12,070.00	0
Parking Lot	623.00	Space	5.61	249,200.00	0
Fast Food Restaurant with Drive Thru	8.00	1000sqft	0.18	8,000.00	0
Health Club	38.30	1000sqft	0.88	38,300.00	0
High Turnover (Sit Down Restaurant)	7.50	1000sqft	0.17	7,500.00	0
Strip Mall	8.00	1000sqft	0.18	8,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	449.63	**CH4 Intensity (lb/MWhr)**	0.011	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factors based on 2023 RPS

Land Use -

Construction Phase - Adjusted construction schedule based on a 12-month time frame

Architectural Coating - 50 g/L for non residential interior based on Rule 442

Vehicle Trips - Trip rates adjusted based on Traffic Study ADT

Vehicle Emission Factors - SAFE Rule applied

Area Coating - 50g/L for non-res interior coating based on Rule 442

Energy Use -

Construction Off-road Equipment Mitigation - SMAQMD Construction BMP

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Vehicle Emission Factors - SAFE Rule applied

Vehicle Emission Factors - SAFE Rule applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	9.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	230.00	199.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblGrading	AcresOfGrading	8.50	10.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.011
tblProjectCharacteristics	CO2IntensityFactor	590.31	449.63

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblVehicleEF	LDA	0.57	0.57
tblVehicleEF	LDA	1.14	1.14
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	1.7400e-003	1.7510e-003
tblVehicleEF	LDA	2.2840e-003	2.2990e-003
tblVehicleEF	LDA	1.6030e-003	1.6140e-003
tblVehicleEF	LDA	2.1000e-003	2.1140e-003
tblVehicleEF	LDA	9.7540e-003	9.7570e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.73	0.73
tblVehicleEF	LDA	0.93	0.94
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	1.7400e-003	1.7510e-003
tblVehicleEF	LDA	2.2840e-003	2.2990e-003
tblVehicleEF	LDA	1.6030e-003	1.6140e-003
tblVehicleEF	LDA	2.1000e-003	2.1140e-003
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.02

tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.54	0.54
tblVehicleEF	LDA	1.42	1.42
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	1.7400e-003	1.7510e-003
tblVehicleEF	LDA	2.2840e-003	2.2990e-003
tblVehicleEF	LDA	1.6030e-003	1.6140e-003
tblVehicleEF	LDA	2.1000e-003	2.1140e-003
tblVehicleEF	LDA	9.2450e-003	9.2480e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.09	0.09
tblVehicleEF	LDT1	1.23	1.23
tblVehicleEF	LDT1	2.97	2.98
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.17	0.17
tblVehicleEF	LDT1	2.5380e-003	2.5550e-003
tblVehicleEF	LDT1	3.2850e-003	3.3070e-003
tblVehicleEF	LDT1	2.3400e-003	2.3550e-003
tblVehicleEF	LDT1	3.0210e-003	3.0410e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.19	0.19
tblVehicleEF	LDT1	0.20	0.20

tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.19
tblVehicleEF	LDT1	0.22	0.22
tblVehicleEF	LDT1	1.53	1.54
tblVehicleEF	LDT1	2.42	2.43
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	2.5380e-003	2.5550e-003
tblVehicleEF	LDT1	3.2850e-003	3.3070e-003
tblVehicleEF	LDT1	2.3400e-003	2.3550e-003
tblVehicleEF	LDT1	3.0210e-003	3.0410e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	1.17	1.18
tblVehicleEF	LDT1	3.72	3.73
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	0.19	0.19
tblVehicleEF	LDT1	2.5380e-003	2.5550e-003
tblVehicleEF	LDT1	3.2850e-003	3.3070e-003
tblVehicleEF	LDT1	2.3400e-003	2.3550e-003
tblVehicleEF	LDT1	3.0210e-003	3.0410e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.22	0.23

tblVehicleEF	LDT1	0.24	0.24
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.23
tblVehicleEF	LDT1	0.27	0.27
tblVehicleEF	LDT2	0.78	0.79
tblVehicleEF	LDT2	1.64	1.64
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	1.7380e-003	1.7490e-003
tblVehicleEF	LDT2	2.3550e-003	2.3710e-003
tblVehicleEF	LDT2	1.5980e-003	1.6090e-003
tblVehicleEF	LDT2	2.1650e-003	2.1790e-003
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.11
tblVehicleEF	LDT2	1.00	1.00
tblVehicleEF	LDT2	1.35	1.35
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	1.7380e-003	1.7490e-003
tblVehicleEF	LDT2	2.3550e-003	2.3710e-003
tblVehicleEF	LDT2	1.5980e-003	1.6090e-003
tblVehicleEF	LDT2	2.1650e-003	2.1790e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.74	0.75
tblVehicleEF	LDT2	2.04	2.05
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	1.7380e-003	1.7490e-003
tblVehicleEF	LDT2	2.3550e-003	2.3710e-003
tblVehicleEF	LDT2	1.5980e-003	1.6090e-003
tblVehicleEF	LDT2	2.1650e-003	2.1790e-003
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	MDV	1.21	1.22
tblVehicleEF	MDV	3.08	3.09
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.27	0.27
tblVehicleEF	MDV	1.8280e-003	1.8400e-003
tblVehicleEF	MDV	2.4820e-003	2.4980e-003
tblVehicleEF	MDV	1.6850e-003	1.6960e-003
tblVehicleEF	MDV	2.2820e-003	2.2970e-003

tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.24	0.24
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.26	0.26
tblVehicleEF	MDV	1.54	1.54
tblVehicleEF	MDV	2.53	2.53
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.25	0.25
tblVehicleEF	MDV	1.8280e-003	1.8400e-003
tblVehicleEF	MDV	2.4820e-003	2.4980e-003
tblVehicleEF	MDV	1.6850e-003	1.6960e-003
tblVehicleEF	MDV	2.2820e-003	2.2970e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.19	0.19
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	1.15	1.16
tblVehicleEF	MDV	3.85	3.86
tblVehicleEF	MDV	0.16	0.16
tblVehicleEF	MDV	0.31	0.31
tblVehicleEF	MDV	1.8280e-003	1.8400e-003
tblVehicleEF	MDV	2.4820e-003	2.4980e-003
tblVehicleEF	MDV	1.6850e-003	1.6960e-003

tblVehicleEF	MDV	2.2820e-003	2.2970e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.28	0.28
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.31	0.31
tblVehicleTrips	ST_TR	86.32	89.65
tblVehicleTrips	ST_TR	6.21	6.45
tblVehicleTrips	ST_TR	722.03	749.86
tblVehicleTrips	ST_TR	20.87	21.67
tblVehicleTrips	ST_TR	158.37	164.47
tblVehicleTrips	ST_TR	42.04	43.66
tblVehicleTrips	SU_TR	31.90	41.99
tblVehicleTrips	SU_TR	5.83	7.67
tblVehicleTrips	SU_TR	542.72	714.40
tblVehicleTrips	SU_TR	26.73	35.19
tblVehicleTrips	SU_TR	131.84	173.55
tblVehicleTrips	SU_TR	20.43	26.89
tblVehicleTrips	WD_TR	148.15	163.58
tblVehicleTrips	WD_TR	74.06	81.77
tblVehicleTrips	WD_TR	496.12	547.80
tblVehicleTrips	WD_TR	32.93	36.36
tblVehicleTrips	WD_TR	127.15	140.40
tblVehicleTrips	WD_TR	44.32	48.94

2.0 Emissions Summary

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	0.2550	2.3820	2.0730	4.6800e-003	0.2517	0.1029	0.3547	0.1043	0.0964	0.2007	0.0000	417.9788	417.9788	0.0680	0.0000	419.6777
2022	0.3116	0.4032	0.4401	9.3000e-004	0.0210	0.0172	0.0382	5.6900e-003	0.0161	0.0218	0.0000	82.9215	82.9215	0.0147	0.0000	83.2900
Maximum	**0.3116**	**2.3820**	**2.0730**	**4.6800e-003**	**0.2517**	**0.1029**	**0.3547**	**0.1043**	**0.0964**	**0.2007**	**0.0000**	**417.9788**	**417.9788**	**0.0680**	**0.0000**	**419.6777**

Mitigated 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	0.2550	2.3820	2.0730	4.6800e-003	0.1759	0.1029	0.2789	0.0640	0.0964	0.1604	0.0000	417.9785	417.9785	0.0680	0.0000	419.6774
2022	0.3116	0.4032	0.4401	9.3000e-004	0.0210	0.0172	0.0382	5.6900e-003	0.0161	0.0218	0.0000	82.9215	82.9215	0.0147	0.0000	83.2900
Maximum	**0.3116**	**2.3820**	**2.0730**	**4.6800e-003**	**0.1759**	**0.1029**	**0.2789**	**0.0640**	**0.0964**	**0.1604**	**0.0000**	**417.9785**	**417.9785**	**0.0680**	**0.0000**	**419.6774**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**27.78**	**0.00**	**19.29**	**36.70**	**0.00**	**18.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2021	6-30-2021	0.9351	0.9351
2	7-1-2021	9-30-2021	0.8460	0.8460
3	10-1-2021	12-31-2021	0.8500	0.8500
4	1-1-2022	3-31-2022	0.7095	0.7095
		Highest	0.9351	0.9351

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	0.3464	8.0000e-005	8.9400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Energy	0.0242	0.2201	0.1849	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	556.6053	556.6053	0.0124	5.8000e-003	558.6433
Mobile	1.8207	6.3496	13.7551	0.0352	2.8213	0.0314	2.8526	0.7562	0.0292	0.7854	0.0000	3,237.2347	3,237.2347	0.1829	0.0000	3,241.8079
Waste						0.0000	0.0000		0.0000	0.0000	86.7523	0.0000	86.7523	5.1269	0.0000	214.9250
Water						0.0000	0.0000		0.0000	0.0000	2.9125	10.8465	13.7590	0.0103	6.3800e-003	15.9181
Total	**2.1913**	**6.5698**	**13.9489**	**0.0365**	**2.8213**	**0.0481**	**2.8694**	**0.7562**	**0.0460**	**0.8022**	**89.6647**	**3,804.7039**	**3,894.3686**	**5.3325**	**0.0122**	**4,031.3128**

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	0.3464	8.0000e-005	8.9400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Energy	0.0208	0.1889	0.1587	1.1300e-003		0.0144	0.0144		0.0144	0.0144	0.0000	502.3840	502.3840	0.0112	5.0900e-003	504.1809
Mobile	1.8207	6.3496	13.7551	0.0352	2.8213	0.0314	2.8526	0.7562	0.0292	0.7854	0.0000	3,237.2347	3,237.2347	0.1829	0.0000	3,241.8079
Waste						0.0000	0.0000		0.0000	0.0000	86.7523	0.0000	86.7523	5.1269	0.0000	214.9250
Water						0.0000	0.0000		0.0000	0.0000	2.3300	9.0221	11.3521	8.2400e-003	5.1100e-003	13.0800
Total	**2.1878**	**6.5386**	**13.9227**	**0.0363**	**2.8213**	**0.0457**	**2.8670**	**0.7562**	**0.0436**	**0.7998**	**89.0822**	**3,748.6582**	**3,837.7405**	**5.3293**	**0.0102**	**3,974.0124**

	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	N20	CO2e
Percent Reduction	**0.16**	**0.48**	**0.19**	**0.52**	**0.00**	**4.93**	**0.08**	**0.00**	**5.16**	**0.30**	**0.65**	**1.47**	**1.45**	**0.06**	**16.26**	**1.42**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2021	4/13/2021	5	9	
2	Grading	Grading	4/14/2021	5/6/2021	5	17	
3	Building Construction	Building Construction	5/7/2021	2/9/2022	5	199	
4	Paving	Paving	2/10/2022	3/4/2022	5	17	
5	Architectural Coating	Architectural Coating	3/7/2022	3/29/2022	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.61

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 116,550; Non-Residential Outdoor: 38,850; Striped Parking Area: 14,952 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	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

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
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	136.00	54.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0813	0.0000	0.0813	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0175	0.1822	0.0952	1.7000e-004		9.2000e-003	9.2000e-003		8.4600e-003	8.4600e-003	0.0000	15.0461	15.0461	4.8700e-003	0.0000	15.1677
Total	**0.0175**	**0.1822**	**0.0952**	**1.7000e-004**	**0.0813**	**9.2000e-003**	**0.0905**	**0.0447**	**8.4600e-003**	**0.0532**	**0.0000**	**15.0461**	**15.0461**	**4.8700e-003**	**0.0000**	**15.1677**

3.2 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	2.8000e-004	1.8000e-004	2.0500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5092	0.5092	1.0000e-005	0.0000	0.5095
Total	**2.8000e-004**	**1.8000e-004**	**2.0500e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5092**	**0.5092**	**1.0000e-005**	**0.0000**	**0.5095**

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					0.0366	0.0000	0.0366	0.0201	0.0000	0.0201	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0175	0.1822	0.0952	1.7000e-004		9.2000e-003	9.2000e-003		8.4600e-003	8.4600e-003	0.0000	15.0461	15.0461	4.8700e-003	0.0000	15.1677
Total	**0.0175**	**0.1822**	**0.0952**	**1.7000e-004**	**0.0366**	**9.2000e-003**	**0.0458**	**0.0201**	**8.4600e-003**	**0.0286**	**0.0000**	**15.0461**	**15.0461**	**4.8700e-003**	**0.0000**	**15.1677**

3.2 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	2.8000e-004	1.8000e-004	2.0500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5092	0.5092	1.0000e-005	0.0000	0.5095
Total	**2.8000e-004**	**1.8000e-004**	**2.0500e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5092**	**0.5092**	**1.0000e-005**	**0.0000**	**0.5095**

3.3 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	tons/yr										MT/yr					
Fugitive Dust					0.0565	0.0000	0.0565	0.0287	0.0000	0.0287	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.2103	0.1348	2.5000e-004		9.8600e-003	9.8600e-003		9.0700e-003	9.0700e-003	0.0000	22.1456	22.1456	7.1600e-003	0.0000	22.3247
Total	**0.0195**	**0.2103**	**0.1348**	**2.5000e-004**	**0.0565**	**9.8600e-003**	**0.0664**	**0.0287**	**9.0700e-003**	**0.0378**	**0.0000**	**22.1456**	**22.1456**	**7.1600e-003**	**0.0000**	**22.3247**

3.3 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	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	4.4000e-004	2.9000e-004	3.2300e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.4000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8014	0.8014	2.0000e-005	0.0000	0.8020
Total	**4.4000e-004**	**2.9000e-004**	**3.2300e-003**	**1.0000e-005**	**9.4000e-004**	**1.0000e-005**	**9.4000e-004**	**2.5000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8014**	**0.8014**	**2.0000e-005**	**0.0000**	**0.8020**

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					0.0254	0.0000	0.0254	0.0129	0.0000	0.0129	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.2103	0.1348	2.5000e-004		9.8600e-003	9.8600e-003		9.0700e-003	9.0700e-003	0.0000	22.1456	22.1456	7.1600e-003	0.0000	22.3247
Total	**0.0195**	**0.2103**	**0.1348**	**2.5000e-004**	**0.0254**	**9.8600e-003**	**0.0353**	**0.0129**	**9.0700e-003**	**0.0220**	**0.0000**	**22.1456**	**22.1456**	**7.1600e-003**	**0.0000**	**22.3247**

3.3 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	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	4.4000e-004	2.9000e-004	3.2300e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.4000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8014	0.8014	2.0000e-005	0.0000	0.8020
Total	**4.4000e-004**	**2.9000e-004**	**3.2300e-003**	**1.0000e-005**	**9.4000e-004**	**1.0000e-005**	**9.4000e-004**	**2.5000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.8014**	**0.8014**	**2.0000e-005**	**0.0000**	**0.8020**

3.4 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	tons/yr										MT/yr					
Off-Road	0.1625	1.4904	1.4172	2.3000e-003		0.0820	0.0820		0.0771	0.0771	0.0000	198.0499	198.0499	0.0478	0.0000	199.2444
Total	**0.1625**	**1.4904**	**1.4172**	**2.3000e-003**		**0.0820**	**0.0820**		**0.0771**	**0.0771**	**0.0000**	**198.0499**	**198.0499**	**0.0478**	**0.0000**	**199.2444**

3.4 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	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	0.0145	0.4723	0.1262	1.1300e-003	0.0270	1.3100e-003	0.0283	7.8000e-003	1.2500e-003	9.0500e-003	0.0000	108.3354	108.3354	6.1900e-003	0.0000	108.4903
Worker	0.0403	0.0263	0.2943	8.1000e-004	0.0854	6.0000e-004	0.0860	0.0227	5.5000e-004	0.0233	0.0000	73.0912	73.0912	1.9200e-003	0.0000	73.1391
Total	**0.0548**	**0.4986**	**0.4205**	**1.9400e-003**	**0.1124**	**1.9100e-003**	**0.1143**	**0.0305**	**1.8000e-003**	**0.0323**	**0.0000**	**181.4266**	**181.4266**	**8.1100e-003**	**0.0000**	**181.6294**

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	0.1625	1.4904	1.4172	2.3000e-003		0.0820	0.0820		0.0771	0.0771	0.0000	198.0496	198.0496	0.0478	0.0000	199.2442
Total	**0.1625**	**1.4904**	**1.4172**	**2.3000e-003**		**0.0820**	**0.0820**		**0.0771**	**0.0771**	**0.0000**	**198.0496**	**198.0496**	**0.0478**	**0.0000**	**199.2442**

3.4 Building Construction - 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	0.0145	0.4723	0.1262	1.1300e-003	0.0270	1.3100e-003	0.0283	7.8000e-003	1.2500e-003	9.0500e-003	0.0000	108.3354	108.3354	6.1900e-003	0.0000	108.4903
Worker	0.0403	0.0263	0.2943	8.1000e-004	0.0854	6.0000e-004	0.0860	0.0227	5.5000e-004	0.0233	0.0000	73.0912	73.0912	1.9200e-003	0.0000	73.1391
Total	**0.0548**	**0.4986**	**0.4205**	**1.9400e-003**	**0.1124**	**1.9100e-003**	**0.1143**	**0.0305**	**1.8000e-003**	**0.0323**	**0.0000**	**181.4266**	**181.4266**	**8.1100e-003**	**0.0000**	**181.6294**

3.4 Building Construction - 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					
Off-Road	0.0239	0.2186	0.2291	3.8000e-004		0.0113	0.0113		0.0107	0.0107	0.0000	32.4415	32.4415	7.7700e-003	0.0000	32.6358
Total	**0.0239**	**0.2186**	**0.2291**	**3.8000e-004**		**0.0113**	**0.0113**		**0.0107**	**0.0107**	**0.0000**	**32.4415**	**32.4415**	**7.7700e-003**	**0.0000**	**32.6358**

3.4 Building Construction - 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	2.2100e-003	0.0734	0.0191	1.8000e-004	4.4200e-003	1.9000e-004	4.6100e-003	1.2800e-003	1.8000e-004	1.4600e-003	0.0000	17.5832	17.5832	9.9000e-004	0.0000	17.6078
Worker	6.1600e-003	3.8700e-003	0.0443	1.3000e-004	0.0140	1.0000e-004	0.0141	3.7200e-003	9.0000e-005	3.8100e-003	0.0000	11.5395	11.5395	2.8000e-004	0.0000	11.5465
Total	**8.3700e-003**	**0.0773**	**0.0633**	**3.1000e-004**	**0.0184**	**2.9000e-004**	**0.0187**	**5.0000e-003**	**2.7000e-004**	**5.2700e-003**	**0.0000**	**29.1227**	**29.1227**	**1.2700e-003**	**0.0000**	**29.1544**

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	0.0239	0.2186	0.2291	3.8000e-004		0.0113	0.0113		0.0107	0.0107	0.0000	32.4415	32.4415	7.7700e-003	0.0000	32.6358
Total	**0.0239**	**0.2186**	**0.2291**	**3.8000e-004**		**0.0113**	**0.0113**		**0.0107**	**0.0107**	**0.0000**	**32.4415**	**32.4415**	**7.7700e-003**	**0.0000**	**32.6358**

3.4 Building Construction - 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	2.2100e-003	0.0734	0.0191	1.8000e-004	4.4200e-003	1.9000e-004	4.6100e-003	1.2800e-003	1.8000e-004	1.4600e-003	0.0000	17.5832	17.5832	9.9000e-004	0.0000	17.6078
Worker	6.1600e-003	3.8700e-003	0.0443	1.3000e-004	0.0140	1.0000e-004	0.0141	3.7200e-003	9.0000e-005	3.8100e-003	0.0000	11.5395	11.5395	2.8000e-004	0.0000	11.5465
Total	**8.3700e-003**	**0.0773**	**0.0633**	**3.1000e-004**	**0.0184**	**2.9000e-004**	**0.0187**	**5.0000e-003**	**2.7000e-004**	**5.2700e-003**	**0.0000**	**29.1227**	**29.1227**	**1.2700e-003**	**0.0000**	**29.1544**

3.5 Paving - 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					
Off-Road	9.3700e-003	0.0946	0.1239	1.9000e-004		4.8300e-003	4.8300e-003		4.4400e-003	4.4400e-003	0.0000	17.0234	17.0234	5.5100e-003	0.0000	17.1611
Paving	7.3500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**0.0946**	**0.1239**	**1.9000e-004**		**4.8300e-003**	**4.8300e-003**		**4.4400e-003**	**4.4400e-003**	**0.0000**	**17.0234**	**17.0234**	**5.5100e-003**	**0.0000**	**17.1611**

3.5 Paving - 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	4.1000e-004	2.6000e-004	2.9700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.4000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.7727	0.7727	2.0000e-005	0.0000	0.7732
Total	**4.1000e-004**	**2.6000e-004**	**2.9700e-003**	**1.0000e-005**	**9.4000e-004**	**1.0000e-005**	**9.4000e-004**	**2.5000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.7727**	**0.7727**	**2.0000e-005**	**0.0000**	**0.7732**

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	9.3700e-003	0.0946	0.1239	1.9000e-004		4.8300e-003	4.8300e-003		4.4400e-003	4.4400e-003	0.0000	17.0234	17.0234	5.5100e-003	0.0000	17.1611
Paving	7.3500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**0.0946**	**0.1239**	**1.9000e-004**		**4.8300e-003**	**4.8300e-003**		**4.4400e-003**	**4.4400e-003**	**0.0000**	**17.0234**	**17.0234**	**5.5100e-003**	**0.0000**	**17.1611**

3.5 Paving - 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	4.1000e-004	2.6000e-004	2.9700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.4000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.7727	0.7727	2.0000e-005	0.0000	0.7732
Total	**4.1000e-004**	**2.6000e-004**	**2.9700e-003**	**1.0000e-005**	**9.4000e-004**	**1.0000e-005**	**9.4000e-004**	**2.5000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.7727**	**0.7727**	**2.0000e-005**	**0.0000**	**0.7732**

3.6 Architectural Coating - 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					
Archit. Coating	0.2597					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7400e-003	0.0120	0.0154	3.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	2.1703	2.1703	1.4000e-004	0.0000	2.1738
Total	**0.2615**	**0.0120**	**0.0154**	**3.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**2.1703**	**2.1703**	**1.4000e-004**	**0.0000**	**2.1738**

3.6 Architectural Coating - 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	7.4000e-004	4.7000e-004	5.3400e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.3909	1.3909	3.0000e-005	0.0000	1.3918
Total	**7.4000e-004**	**4.7000e-004**	**5.3400e-003**	**2.0000e-005**	**1.6900e-003**	**1.0000e-005**	**1.7000e-003**	**4.5000e-004**	**1.0000e-005**	**4.6000e-004**	**0.0000**	**1.3909**	**1.3909**	**3.0000e-005**	**0.0000**	**1.3918**

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	0.2597					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7400e-003	0.0120	0.0154	3.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	2.1703	2.1703	1.4000e-004	0.0000	2.1738
Total	**0.2615**	**0.0120**	**0.0154**	**3.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**2.1703**	**2.1703**	**1.4000e-004**	**0.0000**	**2.1738**

3.6 Architectural Coating - 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	7.4000e-004	4.7000e-004	5.3400e-003	2.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.3909	1.3909	3.0000e-005	0.0000	1.3918
Total	**7.4000e-004**	**4.7000e-004**	**5.3400e-003**	**2.0000e-005**	**1.6900e-003**	**1.0000e-005**	**1.7000e-003**	**4.5000e-004**	**1.0000e-005**	**4.6000e-004**	**0.0000**	**1.3909**	**1.3909**	**3.0000e-005**	**0.0000**	**1.3918**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	1.8207	6.3496	13.7551	0.0352	2.8213	0.0314	2.8526	0.7562	0.0292	0.7854	0.0000	3,237.2347	3,237.2347	0.1829	0.0000	3,241.8079
Unmitigated	1.8207	6.3496	13.7551	0.0352	2.8213	0.0314	2.8526	0.7562	0.0292	0.7854	0.0000	3,237.2347	3,237.2347	0.1829	0.0000	3,241.8079

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Bank (with Drive-Through)	626.51	343.36	160.82	364,610	364,610
Day-Care Center	986.96	77.85	92.58	647,953	647,953
Fast Food Restaurant with Drive Thru	4,382.40	5,998.88	5715.20	3,318,388	3,318,388
Health Club	1,392.59	829.96	1347.78	1,803,477	1,803,477
High Turnover (Sit Down Restaurant)	1,053.00	1,233.53	1301.63	990,170	990,170
Parking Lot	0.00	0.00	0.00		
Strip Mall	391.52	349.28	215.12	443,037	443,037
Total	8,832.98	8,832.86	8,833.12	7,567,634	7,567,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Bank (with Drive-Through)	10.00	5.00	6.50	6.60	74.40	19.00	27	26	47
Day-Care Center	10.00	5.00	6.50	12.70	82.30	5.00	28	58	14
Fast Food Restaurant with Drive	10.00	5.00	6.50	2.20	78.80	19.00	29	21	50
Health Club	10.00	5.00	6.50	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down	10.00	5.00	6.50	8.50	72.50	19.00	37	20	43
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Bank (with Drive-Through)	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Day-Care Center	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Fast Food Restaurant with Drive Thru	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Health Club	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
High Turnover (Sit Down Restaurant)	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Strip Mall	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Natomas Town Center East - Sacramento County, Annual

	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	296.7260	296.7260	7.2600e-003	1.3200e-003	297.3008
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	316.9712	316.9712	7.7500e-003	1.4100e-003	317.5852
NaturalGas Mitigated	0.0208	0.1889	0.1587	1.1300e-003		0.0144	0.0144		0.0144	0.0144	0.0000	205.6580	205.6580	3.9400e-003	3.7700e-003	206.8801
NaturalGas Unmitigated	0.0242	0.2201	0.1849	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	239.6341	239.6341	4.5900e-003	4.3900e-003	241.0581

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					
Bank (with Drive-Through)	137152	7.4000e-004	6.7200e-003	5.6500e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.3190	7.3190	1.4000e-004	1.3000e-004	7.3625
Day-Care Center	184188	9.9000e-004	9.0300e-003	7.5800e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	9.8290	9.8290	1.9000e-004	1.8000e-004	9.8874
Fast Food Restaurant with Drive Thru	1.4216e+006	7.6700e-003	0.0697	0.0585	4.2000e-004		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	75.8620	75.8620	1.4500e-003	1.3900e-003	76.3128
Health Club	1.37152e+006	7.4000e-003	0.0672	0.0565	4.0000e-004		5.1100e-003	5.1100e-003		5.1100e-003	5.1100e-003	0.0000	73.1897	73.1897	1.4000e-003	1.3400e-003	73.6246
High Turnover (Sit Down Restaurant)	1.33275e+006	7.1900e-003	0.0653	0.0549	3.9000e-004		4.9700e-003	4.9700e-003		4.9700e-003	4.9700e-003	0.0000	71.1206	71.1206	1.3600e-003	1.3000e-003	71.5433
Parking Lot	0	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
Strip Mall	43360	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3139	2.3139	4.0000e-005	4.0000e-005	2.3276
Total		**0.0242**	**0.2201**	**0.1849**	**1.3100e-003**		**0.0167**	**0.0167**		**0.0167**	**0.0167**	**0.0000**	**239.6341**	**239.6341**	**4.5800e-003**	**4.3800e-003**	**241.0581**

5.2 Energy by Land Use - NaturalGas

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					
Bank (with Drive-Through)	110277	5.9000e-004	5.4100e-003	4.5400e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8848	5.8848	1.1000e-004	1.1000e-004	5.9198
Day-Care Center	131322	7.1000e-004	6.4400e-003	5.4100e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	7.0078	7.0078	1.3000e-004	1.3000e-004	7.0495
Fast Food Restaurant with Drive Thru	1.27842e+006	6.8900e-003	0.0627	0.0526	3.8000e-004		4.7600e-003	4.7600e-003		4.7600e-003	4.7600e-003	0.0000	68.2212	68.2212	1.3100e-003	1.2500e-003	68.6266
Health Club	1.10277e+006	5.9500e-003	0.0541	0.0454	3.2000e-004		4.1100e-003	4.1100e-003		4.1100e-003	4.1100e-003	0.0000	58.8481	58.8481	1.1300e-003	1.0800e-003	59.1978
High Turnover (Sit Down Restaurant)	1.19852e+006	6.4600e-003	0.0588	0.0494	3.5000e-004		4.4700e-003	4.4700e-003		4.4700e-003	4.4700e-003	0.0000	63.9573	63.9573	1.2300e-003	1.1700e-003	64.3374
Parking Lot	0	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
Strip Mall	32584	1.8000e-004	1.6000e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7388	1.7388	3.0000e-005	3.0000e-005	1.7491
Total		**0.0208**	**0.1889**	**0.1587**	**1.1300e-003**		**0.0144**	**0.0144**		**0.0144**	**0.0144**	**0.0000**	**205.6580**	**205.6580**	**3.9400e-003**	**3.7700e-003**	**206.8801**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	58139.4	11.8575	2.9000e-004	5.0000e-005	11.8804
Day-Care Center	88352.4	18.0194	4.4000e-004	8.0000e-005	18.0543
Fast Food Restaurant with Drive Thru	333680	68.0536	1.6600e-003	3.0000e-004	68.1854
Health Club	581394	118.5746	2.9000e-003	5.3000e-004	118.8043
High Turnover (Sit Down Restaurant)	312825	63.8003	1.5600e-003	2.8000e-004	63.9239
Parking Lot	87220	17.7884	4.4000e-004	8.0000e-005	17.8229
Strip Mall	92560	18.8775	4.6000e-004	8.0000e-005	18.9141
Total		**316.9712**	**7.7500e-003**	**1.4000e-003**	**317.5852**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Bank (with Drive-Through)	54221.3	11.0584	2.7000e-004	5.0000e-005	11.0798
Day-Care Center	80929.4	16.5054	4.0000e-004	7.0000e-005	16.5374
Fast Food Restaurant with Drive Thru	312560	63.7462	1.5600e-003	2.8000e-004	63.8697
Health Club	542213	110.5837	2.7100e-003	4.9000e-004	110.7979
High Turnover (Sit Down Restaurant)	293025	59.7621	1.4600e-003	2.7000e-004	59.8779
Parking Lot	87220	17.7884	4.4000e-004	8.0000e-005	17.8229
Strip Mall	84736	17.2818	4.2000e-004	8.0000e-005	17.3153
Total		**296.7260**	**7.2600e-003**	**1.3200e-003**	**297.3008**

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	tons/yr										MT/yr					
Mitigated	0.3464	8.0000e-005	8.9400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Unmitigated	0.3464	8.0000e-005	8.9400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185

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	0.0260					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3196					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.3000e-004	8.0000e-005	8.9400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Total	**0.3464**	**8.0000e-005**	**8.9400e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0174**	**0.0174**	**5.0000e-005**	**0.0000**	**0.0185**

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	0.0260					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3196					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.3000e-004	8.0000e-005	8.9400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Total	**0.3464**	**8.0000e-005**	**8.9400e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0174**	**0.0174**	**5.0000e-005**	**0.0000**	**0.0185**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.3521	8.2400e-003	5.1100e-003	13.0800
Unmitigated	13.7590	0.0103	6.3800e-003	15.9181

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0.151756 / 0.0930116	0.2743	1.9000e-004	1.2000e-004	0.3141
Day-Care Center	0.517677 / 1.33117	1.6594	6.7000e-004	4.0000e-004	1.7968
Fast Food Restaurant with Drive Thru	2.42827 / 0.154996	3.4374	3.0200e-003	1.8800e-003	4.0730
Health Club	2.26518 / 1.38834	4.0943	2.8400e-003	1.7600e-003	4.6890
High Turnover (Sit Down Restaurant)	2.2765 / 0.145309	3.2225	2.8300e-003	1.7600e-003	3.8185
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.59258 / 0.363194	1.0711	7.4000e-004	4.6000e-004	1.2267
Total		**13.7590**	**0.0103**	**6.3800e-003**	**15.9181**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Bank (with Drive-Through)	0.121405 / 0.0873379	0.2287	1.5000e-004	9.0000e-005	0.2606
Day-Care Center	0.414142 / 1.24997	1.4596	5.4000e-004	3.2000e-004	1.5697
Fast Food Restaurant with Drive Thru	1.94262 / 0.145541	2.7653	2.4200e-003	1.5000e-003	3.2738
Health Club	1.81215 / 1.30365	3.4132	2.2700e-003	1.4100e-003	3.8892
High Turnover (Sit Down Restaurant)	1.8212 / 0.136445	2.5924	2.2700e-003	1.4100e-003	3.0692
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.474064 / 0.341039	0.8929	6.0000e-004	3.7000e-004	1.0174
Total		**11.3521**	**8.2500e-003**	**5.1000e-003**	**13.0800**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	86.7523	5.1269	0.0000	214.9250
Unmitigated	86.7523	5.1269	0.0000	214.9250

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	3.57	0.7247	0.0428	0.0000	1.7954
Day-Care Center	15.69	3.1849	0.1882	0.0000	7.8905
Fast Food Restaurant with Drive Thru	92.15	18.7056	1.1055	0.0000	46.3424
Health Club	218.31	44.3150	2.6189	0.0000	109.7884
High Turnover (Sit Down Restaurant)	89.25	18.1169	1.0707	0.0000	44.8840
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.4	1.7051	0.1008	0.0000	4.2244
Total		**86.7523**	**5.1269**	**0.0000**	**214.9250**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Bank (with Drive-Through)	3.57	0.7247	0.0428	0.0000	1.7954
Day-Care Center	15.69	3.1849	0.1882	0.0000	7.8905
Fast Food Restaurant with Drive Thru	92.15	18.7056	1.1055	0.0000	46.3424
Health Club	218.31	44.3150	2.6189	0.0000	109.7884
High Turnover (Sit Down Restaurant)	89.25	18.1169	1.0707	0.0000	44.8840
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.4	1.7051	0.1008	0.0000	4.2244
Total		**86.7523**	**5.1269**	**0.0000**	**214.9250**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Natomas Town Center East

Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	3.83	1000sqft	0.09	3,830.00	0
Day-Care Center	12.07	1000sqft	0.28	12,070.00	0
Parking Lot	623.00	Space	5.61	249,200.00	0
Fast Food Restaurant with Drive Thru	8.00	1000sqft	0.18	8,000.00	0
Health Club	38.30	1000sqft	0.88	38,300.00	0
High Turnover (Sit Down Restaurant)	7.50	1000sqft	0.17	7,500.00	0
Strip Mall	8.00	1000sqft	0.18	8,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	449.63	**CH4 Intensity (lb/MWhr)**	0.011	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factors based on 2023 RPS

Land Use -

Construction Phase - Adjusted construction schedule based on a 12-month time frame

Architectural Coating - 50 g/L for non residential interior based on Rule 442

Vehicle Trips - Trip rates adjusted based on Traffic Study ADT

Vehicle Emission Factors - SAFE Rule applied

Area Coating - 50g/L for non-res interior coating based on Rule 442

Energy Use -

Construction Off-road Equipment Mitigation - SMAQMD Construction BMP

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Vehicle Emission Factors - SAFE Rule applied

Vehicle Emission Factors - SAFE Rule applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	9.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	230.00	199.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblGrading	AcresOfGrading	8.50	10.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.011
tblProjectCharacteristics	CO2IntensityFactor	590.31	449.63

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblVehicleEF	LDA	0.57	0.57
tblVehicleEF	LDA	1.14	1.14
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tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	1.7400e-003	1.7510e-003
tblVehicleEF	LDA	2.2840e-003	2.2990e-003
tblVehicleEF	LDA	1.6030e-003	1.6140e-003
tblVehicleEF	LDA	2.1000e-003	2.1140e-003
tblVehicleEF	LDA	9.7540e-003	9.7570e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.04
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tblVehicleEF	LDA	0.73	0.73
tblVehicleEF	LDA	0.93	0.94
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	1.7400e-003	1.7510e-003
tblVehicleEF	LDA	2.2840e-003	2.2990e-003
tblVehicleEF	LDA	1.6030e-003	1.6140e-003
tblVehicleEF	LDA	2.1000e-003	2.1140e-003
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.02

tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.54	0.54
tblVehicleEF	LDA	1.42	1.42
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	1.7400e-003	1.7510e-003
tblVehicleEF	LDA	2.2840e-003	2.2990e-003
tblVehicleEF	LDA	1.6030e-003	1.6140e-003
tblVehicleEF	LDA	2.1000e-003	2.1140e-003
tblVehicleEF	LDA	9.2450e-003	9.2480e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.09	0.09
tblVehicleEF	LDT1	1.23	1.23
tblVehicleEF	LDT1	2.97	2.98
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tblVehicleEF	LDT1	0.17	0.17
tblVehicleEF	LDT1	2.5380e-003	2.5550e-003
tblVehicleEF	LDT1	3.2850e-003	3.3070e-003
tblVehicleEF	LDT1	2.3400e-003	2.3550e-003
tblVehicleEF	LDT1	3.0210e-003	3.0410e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.19	0.19
tblVehicleEF	LDT1	0.20	0.20

tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.19
tblVehicleEF	LDT1	0.22	0.22
tblVehicleEF	LDT1	1.53	1.54
tblVehicleEF	LDT1	2.42	2.43
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	2.5380e-003	2.5550e-003
tblVehicleEF	LDT1	3.2850e-003	3.3070e-003
tblVehicleEF	LDT1	2.3400e-003	2.3550e-003
tblVehicleEF	LDT1	3.0210e-003	3.0410e-003
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tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	1.17	1.18
tblVehicleEF	LDT1	3.72	3.73
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	0.19	0.19
tblVehicleEF	LDT1	2.5380e-003	2.5550e-003
tblVehicleEF	LDT1	3.2850e-003	3.3070e-003
tblVehicleEF	LDT1	2.3400e-003	2.3550e-003
tblVehicleEF	LDT1	3.0210e-003	3.0410e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.22	0.23

tblVehicleEF	LDT1	0.24	0.24
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.23
tblVehicleEF	LDT1	0.27	0.27
tblVehicleEF	LDT2	0.78	0.79
tblVehicleEF	LDT2	1.64	1.64
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	1.7380e-003	1.7490e-003
tblVehicleEF	LDT2	2.3550e-003	2.3710e-003
tblVehicleEF	LDT2	1.5980e-003	1.6090e-003
tblVehicleEF	LDT2	2.1650e-003	2.1790e-003
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tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.11
tblVehicleEF	LDT2	1.00	1.00
tblVehicleEF	LDT2	1.35	1.35
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	1.7380e-003	1.7490e-003
tblVehicleEF	LDT2	2.3550e-003	2.3710e-003
tblVehicleEF	LDT2	1.5980e-003	1.6090e-003
tblVehicleEF	LDT2	2.1650e-003	2.1790e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.74	0.75
tblVehicleEF	LDT2	2.04	2.05
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	1.7380e-003	1.7490e-003
tblVehicleEF	LDT2	2.3550e-003	2.3710e-003
tblVehicleEF	LDT2	1.5980e-003	1.6090e-003
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tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.02
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tblVehicleEF	LDT2	0.13	0.13
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tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.27	0.27
tblVehicleEF	MDV	1.8280e-003	1.8400e-003
tblVehicleEF	MDV	2.4820e-003	2.4980e-003
tblVehicleEF	MDV	1.6850e-003	1.6960e-003
tblVehicleEF	MDV	2.2820e-003	2.2970e-003

tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.24	0.24
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.26	0.26
tblVehicleEF	MDV	1.54	1.54
tblVehicleEF	MDV	2.53	2.53
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.25	0.25
tblVehicleEF	MDV	1.8280e-003	1.8400e-003
tblVehicleEF	MDV	2.4820e-003	2.4980e-003
tblVehicleEF	MDV	1.6850e-003	1.6960e-003
tblVehicleEF	MDV	2.2820e-003	2.2970e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.19	0.19
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	1.15	1.16
tblVehicleEF	MDV	3.85	3.86
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tblVehicleEF	MDV	0.31	0.31
tblVehicleEF	MDV	1.8280e-003	1.8400e-003
tblVehicleEF	MDV	2.4820e-003	2.4980e-003
tblVehicleEF	MDV	1.6850e-003	1.6960e-003

tblVehicleEF	MDV	2.2820e-003	2.2970e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.28	0.28
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.31	0.31
tblVehicleTrips	ST_TR	86.32	89.65
tblVehicleTrips	ST_TR	6.21	6.45
tblVehicleTrips	ST_TR	722.03	749.86
tblVehicleTrips	ST_TR	20.87	21.67
tblVehicleTrips	ST_TR	158.37	164.47
tblVehicleTrips	ST_TR	42.04	43.66
tblVehicleTrips	SU_TR	31.90	41.99
tblVehicleTrips	SU_TR	5.83	7.67
tblVehicleTrips	SU_TR	542.72	714.40
tblVehicleTrips	SU_TR	26.73	35.19
tblVehicleTrips	SU_TR	131.84	173.55
tblVehicleTrips	SU_TR	20.43	26.89
tblVehicleTrips	WD_TR	148.15	163.58
tblVehicleTrips	WD_TR	74.06	81.77
tblVehicleTrips	WD_TR	496.12	547.80
tblVehicleTrips	WD_TR	32.93	36.36
tblVehicleTrips	WD_TR	127.15	140.40
tblVehicleTrips	WD_TR	44.32	48.94

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	3.9603	40.5340	22.0287	0.0507	18.2032	2.0454	20.2486	9.9670	1.8818	11.8488	0.0000	5,007.7561	5,007.7561	1.1957	0.0000	5,025.7792
2022	30.8630	21.0231	21.3863	0.0502	1.3594	0.8288	2.1883	0.3679	0.7799	1.1478	0.0000	4,959.0255	4,959.0255	0.7168	0.0000	4,976.8211
Maximum	**30.8630**	**40.5340**	**22.0287**	**0.0507**	**18.2032**	**2.0454**	**20.2486**	**9.9670**	**1.8818**	**11.8488**	**0.0000**	**5,007.7561**	**5,007.7561**	**1.1957**	**0.0000**	**5,025.7792**

Mitigated 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	lb/day										lb/day					
2021	3.9603	40.5340	22.0287	0.0507	8.2668	2.0454	10.3121	4.5051	1.8818	6.3869	0.0000	5,007.7561	5,007.7561	1.1957	0.0000	5,025.7792
2022	30.8630	21.0231	21.3863	0.0502	1.3594	0.8288	2.1883	0.3679	0.7799	1.1478	0.0000	4,959.0255	4,959.0255	0.7168	0.0000	4,976.8211
Maximum	**30.8630**	**40.5340**	**22.0287**	**0.0507**	**8.2668**	**2.0454**	**10.3121**	**4.5051**	**1.8818**	**6.3869**	**0.0000**	**5,007.7561**	**5,007.7561**	**1.1957**	**0.0000**	**5,025.7792**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**50.79**	**0.00**	**44.29**	**52.85**	**0.00**	**42.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	1.9000	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Energy	0.1327	1.2062	1.0132	7.2400e-003		0.0917	0.0917		0.0917	0.0917		1,447.4048	1,447.4048	0.0277	0.0265	1,456.0060
Mobile	16.1293	41.3546	93.8306	0.2486	19.1312	0.2045	19.3357	5.1134	0.1904	5.3038		25,220.3280	25,220.3280	1.3175		25,253.2650
Total	**18.1620**	**42.5614**	**94.9153**	**0.2559**	**19.1312**	**0.2965**	**19.4277**	**5.1134**	**0.2824**	**5.3957**		**26,667.8862**	**26,667.8862**	**1.3456**	**0.0265**	**26,709.4345**

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	1.9000	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Energy	0.1139	1.0352	0.8695	6.2100e-003		0.0787	0.0787		0.0787	0.0787		1,242.1872	1,242.1872	0.0238	0.0228	1,249.5689
Mobile	16.1293	41.3546	93.8306	0.2486	19.1312	0.2045	19.3357	5.1134	0.1904	5.3038		25,220.3280	25,220.3280	1.3175		25,253.2650
Total	**18.1432**	**42.3904**	**94.7716**	**0.2549**	**19.1312**	**0.2835**	**19.4147**	**5.1134**	**0.2694**	**5.3827**		**26,462.6686**	**26,462.6686**	**1.3417**	**0.0228**	**26,502.9973**

	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	N20	CO2e
Percent Reduction	**0.10**	**0.40**	**0.15**	**0.40**	**0.00**	**4.38**	**0.07**	**0.00**	**4.60**	**0.24**	**0.00**	**0.77**	**0.77**	**0.29**	**14.20**	**0.77**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2021	4/13/2021	5	9	
2	Grading	Grading	4/14/2021	5/6/2021	5	17	
3	Building Construction	Building Construction	5/7/2021	2/9/2022	5	199	
4	Paving	Paving	2/10/2022	3/4/2022	5	17	
5	Architectural Coating	Architectural Coating	3/7/2022	3/29/2022	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.61

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 116,550; Non-Residential Outdoor: 38,850; Striped Parking Area: 14,952 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	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

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
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	136.00	54.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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	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		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**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.2 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	0.0721	0.0369	0.5385	1.3900e-003	0.1369	9.2000e-004	0.1379	0.0363	8.5000e-004	0.0372		137.9662	137.9662	3.6700e-003		138.0580
Total	**0.0721**	**0.0369**	**0.5385**	**1.3900e-003**	**0.1369**	**9.2000e-004**	**0.1379**	**0.0363**	**8.5000e-004**	**0.0372**		**137.9662**	**137.9662**	**3.6700e-003**		**138.0580**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			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**	**8.1298**	**2.0445**	**10.1743**	**4.4688**	**1.8809**	**6.3497**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.2 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	0.0721	0.0369	0.5385	1.3900e-003	0.1369	9.2000e-004	0.1379	0.0363	8.5000e-004	0.0372		137.9662	137.9662	3.6700e-003		138.0580
Total	**0.0721**	**0.0369**	**0.5385**	**1.3900e-003**	**0.1369**	**9.2000e-004**	**0.1379**	**0.0363**	**8.5000e-004**	**0.0372**		**137.9662**	**137.9662**	**3.6700e-003**		**138.0580**

3.3 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					6.6459	0.0000	6.6459	3.3776	0.0000	3.3776			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.6459**	**1.1599**	**7.8058**	**3.3776**	**1.0671**	**4.4447**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.3 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	0.0000	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	0.0601	0.0308	0.4487	1.1500e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		114.9719	114.9719	3.0600e-003		115.0483
Total	**0.0601**	**0.0308**	**0.4487**	**1.1500e-003**	**0.1141**	**7.7000e-004**	**0.1149**	**0.0303**	**7.1000e-004**	**0.0310**		**114.9719**	**114.9719**	**3.0600e-003**		**115.0483**

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					2.9907	0.0000	2.9907	1.5199	0.0000	1.5199			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.9907**	**1.1599**	**4.1506**	**1.5199**	**1.0671**	**2.5870**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.3 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	0.0000	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	0.0601	0.0308	0.4487	1.1500e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		114.9719	114.9719	3.0600e-003		115.0483
Total	**0.0601**	**0.0308**	**0.4487**	**1.1500e-003**	**0.1141**	**7.7000e-004**	**0.1149**	**0.0303**	**7.1000e-004**	**0.0310**		**114.9719**	**114.9719**	**3.0600e-003**		**115.0483**

3.4 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**

3.4 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	0.1669	5.4238	1.3850	0.0133	0.3249	0.0149	0.3398	0.0935	0.0142	0.1077		1,411.9807	1,411.9807	0.0772		1,413.9100
Worker	0.5451	0.2790	4.0685	0.0105	1.0346	6.9800e-003	1.0415	0.2744	6.4300e-003	0.2809		1,042.4115	1,042.4115	0.0277		1,043.1049
Total	**0.7120**	**5.7028**	**5.4535**	**0.0238**	**1.3595**	**0.0219**	**1.3813**	**0.3679**	**0.0207**	**0.3886**		**2,454.3922**	**2,454.3922**	**0.1049**		**2,457.0149**

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**

3.4 Building Construction - 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	0.1669	5.4238	1.3850	0.0133	0.3249	0.0149	0.3398	0.0935	0.0142	0.1077		1,411.9807	1,411.9807	0.0772		1,413.9100
Worker	0.5451	0.2790	4.0685	0.0105	1.0346	6.9800e-003	1.0415	0.2744	6.4300e-003	0.2809		1,042.4115	1,042.4115	0.0277		1,043.1049
Total	**0.7120**	**5.7028**	**5.4535**	**0.0238**	**1.3595**	**0.0219**	**1.3813**	**0.3679**	**0.0207**	**0.3886**		**2,454.3922**	**2,454.3922**	**0.1049**		**2,457.0149**

3.4 Building Construction - 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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 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	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	0.1548	5.1565	1.2761	0.0132	0.3249	0.0130	0.3379	0.0935	0.0125	0.1060		1,399.6639	1,399.6639	0.0749		1,401.5375
Worker	0.5088	0.2510	3.7468	0.0101	1.0346	6.8000e-003	1.0414	0.2744	6.2700e-003	0.2807		1,005.0281	1,005.0281	0.0249		1,005.6514
Total	**0.6636**	**5.4074**	**5.0229**	**0.0233**	**1.3594**	**0.0198**	**1.3793**	**0.3679**	**0.0187**	**0.3866**		**2,404.6919**	**2,404.6919**	**0.0999**		**2,407.1889**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 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	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	0.1548	5.1565	1.2761	0.0132	0.3249	0.0130	0.3379	0.0935	0.0125	0.1060		1,399.6639	1,399.6639	0.0749		1,401.5375
Worker	0.5088	0.2510	3.7468	0.0101	1.0346	6.8000e-003	1.0414	0.2744	6.2700e-003	0.2807		1,005.0281	1,005.0281	0.0249		1,005.6514
Total	**0.6636**	**5.4074**	**5.0229**	**0.0233**	**1.3594**	**0.0198**	**1.3793**	**0.3679**	**0.0187**	**0.3866**		**2,404.6919**	**2,404.6919**	**0.0999**		**2,407.1889**

3.5 Paving - 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	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9674**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.5 Paving - 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	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	0.0561	0.0277	0.4133	1.1100e-003	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		110.8487	110.8487	2.7500e-003		110.9174
Total	**0.0561**	**0.0277**	**0.4133**	**1.1100e-003**	**0.1141**	**7.5000e-004**	**0.1149**	**0.0303**	**6.9000e-004**	**0.0310**		**110.8487**	**110.8487**	**2.7500e-003**		**110.9174**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9674**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.5 Paving - 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	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	0.0561	0.0277	0.4133	1.1100e-003	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		110.8487	110.8487	2.7500e-003		110.9174
Total	**0.0561**	**0.0277**	**0.4133**	**1.1100e-003**	**0.1141**	**7.5000e-004**	**0.1149**	**0.0303**	**6.9000e-004**	**0.0310**		**110.8487**	**110.8487**	**2.7500e-003**		**110.9174**

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	30.5575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**30.7620**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 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	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	0.1010	0.0498	0.7439	2.0000e-003	0.2054	1.3500e-003	0.2067	0.0545	1.2400e-003	0.0557		199.5276	199.5276	4.9500e-003		199.6514
Total	**0.1010**	**0.0498**	**0.7439**	**2.0000e-003**	**0.2054**	**1.3500e-003**	**0.2067**	**0.0545**	**1.2400e-003**	**0.0557**		**199.5276**	**199.5276**	**4.9500e-003**		**199.6514**

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					
Archit. Coating	30.5575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**30.7620**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 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	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	0.1010	0.0498	0.7439	2.0000e-003	0.2054	1.3500e-003	0.2067	0.0545	1.2400e-003	0.0557		199.5276	199.5276	4.9500e-003		199.6514
Total	**0.1010**	**0.0498**	**0.7439**	**2.0000e-003**	**0.2054**	**1.3500e-003**	**0.2067**	**0.0545**	**1.2400e-003**	**0.0557**		**199.5276**	**199.5276**	**4.9500e-003**		**199.6514**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	16.1293	41.3546	93.8306	0.2486	19.1312	0.2045	19.3357	5.1134	0.1904	5.3038		25,220.3280	25,220.3280	1.3175		25,253.2650
Unmitigated	16.1293	41.3546	93.8306	0.2486	19.1312	0.2045	19.3357	5.1134	0.1904	5.3038		25,220.3280	25,220.3280	1.3175		25,253.2650

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Bank (with Drive-Through)	626.51	343.36	160.82	364,610	364,610
Day-Care Center	986.96	77.85	92.58	647,953	647,953
Fast Food Restaurant with Drive Thru	4,382.40	5,998.88	5715.20	3,318,388	3,318,388
Health Club	1,392.59	829.96	1347.78	1,803,477	1,803,477
High Turnover (Sit Down Restaurant)	1,053.00	1,233.53	1301.63	990,170	990,170
Parking Lot	0.00	0.00	0.00		
Strip Mall	391.52	349.28	215.12	443,037	443,037
Total	8,832.98	8,832.86	8,833.12	7,567,634	7,567,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Bank (with Drive-Through)	10.00	5.00	6.50	6.60	74.40	19.00	27	26	47
Day-Care Center	10.00	5.00	6.50	12.70	82.30	5.00	28	58	14
Fast Food Restaurant with Drive	10.00	5.00	6.50	2.20	78.80	19.00	29	21	50
Health Club	10.00	5.00	6.50	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down	10.00	5.00	6.50	8.50	72.50	19.00	37	20	43
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Bank (with Drive-Through)	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Day-Care Center	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Fast Food Restaurant with Drive Thru	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Health Club	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
High Turnover (Sit Down Restaurant)	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Strip Mall	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Natomas Town Center East - Sacramento County, Summer

	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	0.1139	1.0352	0.8695	6.2100e-003		0.0787	0.0787		0.0787	0.0787		1,242.1872	1,242.1872	0.0238	0.0228	1,249.5689
NaturalGas Unmitigated	0.1327	1.2062	1.0132	7.2400e-003		0.0917	0.0917		0.0917	0.0917		1,447.4048	1,447.4048	0.0277	0.0265	1,456.0060

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					
Bank (with Drive-Through)	375.76	4.0500e-003	0.0368	0.0309	2.2000e-004		2.8000e-003	2.8000e-003		2.8000e-003	2.8000e-003		44.2070	44.2070	8.5000e-004	8.1000e-004	44.4697
Day-Care Center	504.625	5.4400e-003	0.0495	0.0416	3.0000e-004		3.7600e-003	3.7600e-003		3.7600e-003	3.7600e-003		59.3677	59.3677	1.1400e-003	1.0900e-003	59.7205
Fast Food Restaurant with Drive Thru	3894.79	0.0420	0.3818	0.3208	2.2900e-003		0.0290	0.0290		0.0290	0.0290		458.2111	458.2111	8.7800e-003	8.4000e-003	460.9340
Health Club	3757.6	0.0405	0.3684	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.0703	442.0703	8.4700e-003	8.1000e-003	444.6973
High Turnover (Sit Down Restaurant)	3651.37	0.0394	0.3580	0.3007	2.1500e-003		0.0272	0.0272		0.0272	0.0272		429.5729	429.5729	8.2300e-003	7.8800e-003	432.1257
Parking Lot	0	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
Strip Mall	118.795	1.2800e-003	0.0117	9.7800e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004		13.9758	13.9758	2.7000e-004	2.6000e-004	14.0589
Total		**0.1327**	**1.2062**	**1.0132**	**7.2400e-003**		**0.0917**	**0.0917**		**0.0917**	**0.0917**		**1,447.4049**	**1,447.4049**	**0.0277**	**0.0265**	**1,456.0060**

5.2 Energy by Land Use - NaturalGas

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	lb/day										lb/day					
Bank (with Drive-Through)	0.302129	3.2600e-003	0.0296	0.0249	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003		35.5446	35.5446	6.8000e-004	6.5000e-004	35.7559
Day-Care Center	0.359785	3.8800e-003	0.0353	0.0296	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003		42.3277	42.3277	8.1000e-004	7.8000e-004	42.5792
Fast Food Restaurant with Drive Thru	3.50251	0.0378	0.3434	0.2884	2.0600e-003		0.0261	0.0261		0.0261	0.0261		412.0600	412.0600	7.9000e-003	7.5500e-003	414.5086
Health Club	3.02129	0.0326	0.2962	0.2488	1.7800e-003		0.0225	0.0225		0.0225	0.0225		355.4462	355.4462	6.8100e-003	6.5200e-003	357.5585
High Turnover (Sit Down Restaurant)	3.2836	0.0354	0.3219	0.2704	1.9300e-003		0.0245	0.0245		0.0245	0.0245		386.3062	386.3062	7.4000e-003	7.0800e-003	388.6018
Parking Lot	0	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
Strip Mall	0.0892712	9.6000e-004	8.7500e-003	7.3500e-003	5.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		10.5025	10.5025	2.0000e-004	1.9000e-004	10.5649
Total		**0.1139**	**1.0352**	**0.8695**	**6.2100e-003**		**0.0787**	**0.0787**		**0.0787**	**0.0787**		**1,242.1872**	**1,242.1872**	**0.0238**	**0.0228**	**1,249.5689**

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	1.9000	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Unmitigated	1.9000	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634

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	0.1423					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7511					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.6300e-003	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Total	**1.9000**	**6.5000e-004**	**0.0715**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**		**0.1534**	**0.1534**	**4.0000e-004**		**0.1634**

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	0.1423					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7511					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.6300e-003	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Total	**1.9000**	**6.5000e-004**	**0.0715**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**		**0.1534**	**0.1534**	**4.0000e-004**		**0.1634**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Natomas Town Center East

Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	3.83	1000sqft	0.09	3,830.00	0
Day-Care Center	12.07	1000sqft	0.28	12,070.00	0
Parking Lot	623.00	Space	5.61	249,200.00	0
Fast Food Restaurant with Drive Thru	8.00	1000sqft	0.18	8,000.00	0
Health Club	38.30	1000sqft	0.88	38,300.00	0
High Turnover (Sit Down Restaurant)	7.50	1000sqft	0.17	7,500.00	0
Strip Mall	8.00	1000sqft	0.18	8,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	449.63	**CH4 Intensity (lb/MWhr)**	0.011	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factors based on 2023 RPS

Land Use -

Construction Phase - Adjusted construction schedule based on a 12-month time frame

Architectural Coating - 50 g/L for non residential interior based on Rule 442

Vehicle Trips - Trip rates adjusted based on Traffic Study ADT

Vehicle Emission Factors - SAFE Rule applied

Area Coating - 50g/L for non-res interior coating based on Rule 442

Energy Use -

Construction Off-road Equipment Mitigation - SMAQMD Construction BMP

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Vehicle Emission Factors - SAFE Rule applied

Vehicle Emission Factors - SAFE Rule applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	9.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	230.00	199.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblGrading	AcresOfGrading	8.50	10.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.011
tblProjectCharacteristics	CO2IntensityFactor	590.31	449.63

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblVehicleEF	LDA	0.57	0.57
tblVehicleEF	LDA	1.14	1.14
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	1.7400e-003	1.7510e-003
tblVehicleEF	LDA	2.2840e-003	2.2990e-003
tblVehicleEF	LDA	1.6030e-003	1.6140e-003
tblVehicleEF	LDA	2.1000e-003	2.1140e-003
tblVehicleEF	LDA	9.7540e-003	9.7570e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.73	0.73
tblVehicleEF	LDA	0.93	0.94
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	1.7400e-003	1.7510e-003
tblVehicleEF	LDA	2.2840e-003	2.2990e-003
tblVehicleEF	LDA	1.6030e-003	1.6140e-003
tblVehicleEF	LDA	2.1000e-003	2.1140e-003
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.02

tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.54	0.54
tblVehicleEF	LDA	1.42	1.42
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	1.7400e-003	1.7510e-003
tblVehicleEF	LDA	2.2840e-003	2.2990e-003
tblVehicleEF	LDA	1.6030e-003	1.6140e-003
tblVehicleEF	LDA	2.1000e-003	2.1140e-003
tblVehicleEF	LDA	9.2450e-003	9.2480e-003
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.09	0.09
tblVehicleEF	LDT1	1.23	1.23
tblVehicleEF	LDT1	2.97	2.98
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.17	0.17
tblVehicleEF	LDT1	2.5380e-003	2.5550e-003
tblVehicleEF	LDT1	3.2850e-003	3.3070e-003
tblVehicleEF	LDT1	2.3400e-003	2.3550e-003
tblVehicleEF	LDT1	3.0210e-003	3.0410e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.19	0.19
tblVehicleEF	LDT1	0.20	0.20

tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.19
tblVehicleEF	LDT1	0.22	0.22
tblVehicleEF	LDT1	1.53	1.54
tblVehicleEF	LDT1	2.42	2.43
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	2.5380e-003	2.5550e-003
tblVehicleEF	LDT1	3.2850e-003	3.3070e-003
tblVehicleEF	LDT1	2.3400e-003	2.3550e-003
tblVehicleEF	LDT1	3.0210e-003	3.0410e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	0.18	0.18
tblVehicleEF	LDT1	1.17	1.18
tblVehicleEF	LDT1	3.72	3.73
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	0.19	0.19
tblVehicleEF	LDT1	2.5380e-003	2.5550e-003
tblVehicleEF	LDT1	3.2850e-003	3.3070e-003
tblVehicleEF	LDT1	2.3400e-003	2.3550e-003
tblVehicleEF	LDT1	3.0210e-003	3.0410e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.22	0.23

tblVehicleEF	LDT1	0.24	0.24
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.23
tblVehicleEF	LDT1	0.27	0.27
tblVehicleEF	LDT2	0.78	0.79
tblVehicleEF	LDT2	1.64	1.64
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	LDT2	1.7380e-003	1.7490e-003
tblVehicleEF	LDT2	2.3550e-003	2.3710e-003
tblVehicleEF	LDT2	1.5980e-003	1.6090e-003
tblVehicleEF	LDT2	2.1650e-003	2.1790e-003
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.11	0.11
tblVehicleEF	LDT2	1.00	1.00
tblVehicleEF	LDT2	1.35	1.35
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	1.7380e-003	1.7490e-003
tblVehicleEF	LDT2	2.3550e-003	2.3710e-003
tblVehicleEF	LDT2	1.5980e-003	1.6090e-003
tblVehicleEF	LDT2	2.1650e-003	2.1790e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.74	0.75
tblVehicleEF	LDT2	2.04	2.05
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	1.7380e-003	1.7490e-003
tblVehicleEF	LDT2	2.3550e-003	2.3710e-003
tblVehicleEF	LDT2	1.5980e-003	1.6090e-003
tblVehicleEF	LDT2	2.1650e-003	2.1790e-003
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.12	0.12
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.13	0.13
tblVehicleEF	MDV	1.21	1.22
tblVehicleEF	MDV	3.08	3.09
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.27	0.27
tblVehicleEF	MDV	1.8280e-003	1.8400e-003
tblVehicleEF	MDV	2.4820e-003	2.4980e-003
tblVehicleEF	MDV	1.6850e-003	1.6960e-003
tblVehicleEF	MDV	2.2820e-003	2.2970e-003

tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.24	0.24
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.26	0.26
tblVehicleEF	MDV	1.54	1.54
tblVehicleEF	MDV	2.53	2.53
tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.25	0.25
tblVehicleEF	MDV	1.8280e-003	1.8400e-003
tblVehicleEF	MDV	2.4820e-003	2.4980e-003
tblVehicleEF	MDV	1.6850e-003	1.6960e-003
tblVehicleEF	MDV	2.2820e-003	2.2970e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.19	0.19
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.12	0.12
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	1.15	1.16
tblVehicleEF	MDV	3.85	3.86
tblVehicleEF	MDV	0.16	0.16
tblVehicleEF	MDV	0.31	0.31
tblVehicleEF	MDV	1.8280e-003	1.8400e-003
tblVehicleEF	MDV	2.4820e-003	2.4980e-003
tblVehicleEF	MDV	1.6850e-003	1.6960e-003

tblVehicleEF	MDV	2.2820e-003	2.2970e-003
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.28	0.28
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.31	0.31
tblVehicleTrips	ST_TR	86.32	89.65
tblVehicleTrips	ST_TR	6.21	6.45
tblVehicleTrips	ST_TR	722.03	749.86
tblVehicleTrips	ST_TR	20.87	21.67
tblVehicleTrips	ST_TR	158.37	164.47
tblVehicleTrips	ST_TR	42.04	43.66
tblVehicleTrips	SU_TR	31.90	41.99
tblVehicleTrips	SU_TR	5.83	7.67
tblVehicleTrips	SU_TR	542.72	714.40
tblVehicleTrips	SU_TR	26.73	35.19
tblVehicleTrips	SU_TR	131.84	173.55
tblVehicleTrips	SU_TR	20.43	26.89
tblVehicleTrips	WD_TR	148.15	163.58
tblVehicleTrips	WD_TR	74.06	81.77
tblVehicleTrips	WD_TR	496.12	547.80
tblVehicleTrips	WD_TR	32.93	36.36
tblVehicleTrips	WD_TR	127.15	140.40
tblVehicleTrips	WD_TR	44.32	48.94

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2021	3.9546	40.5427	21.6517	0.0491	18.2032	2.0454	20.2486	9.9670	1.8818	11.8488	0.0000	4,844.5284	4,844.5284	1.1953	0.0000	4,862.6280
2022	30.8552	21.1576	21.0270	0.0487	1.3594	0.8297	2.1891	0.3679	0.7807	1.1486	0.0000	4,800.4952	4,800.4952	0.7164	0.0000	4,818.3708
Maximum	**30.8552**	**40.5427**	**21.6517**	**0.0491**	**18.2032**	**2.0454**	**20.2486**	**9.9670**	**1.8818**	**11.8488**	**0.0000**	**4,844.5284**	**4,844.5284**	**1.1953**	**0.0000**	**4,862.6280**

Mitigated 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	lb/day										lb/day					
2021	3.9546	40.5427	21.6517	0.0491	8.2668	2.0454	10.3121	4.5051	1.8818	6.3869	0.0000	4,844.5284	4,844.5284	1.1953	0.0000	4,862.6280
2022	30.8552	21.1576	21.0270	0.0487	1.3594	0.8297	2.1891	0.3679	0.7807	1.1486	0.0000	4,800.4952	4,800.4952	0.7164	0.0000	4,818.3708
Maximum	**30.8552**	**40.5427**	**21.6517**	**0.0491**	**8.2668**	**2.0454**	**10.3121**	**4.5051**	**1.8818**	**6.3869**	**0.0000**	**4,844.5284**	**4,844.5284**	**1.1953**	**0.0000**	**4,862.6280**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**50.79**	**0.00**	**44.28**	**52.85**	**0.00**	**42.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	1.9000	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Energy	0.1327	1.2062	1.0132	7.2400e-003		0.0917	0.0917		0.0917	0.0917		1,447.4048	1,447.4048	0.0277	0.0265	1,456.0060
Mobile	11.1637	42.6556	99.6368	0.2252	19.1312	0.2096	19.3408	5.1134	0.1953	5.3087		22,836.8986	22,836.8986	1.3937		22,871.7399
Total	**13.1964**	**43.8624**	**100.7215**	**0.2324**	**19.1312**	**0.3016**	**19.4328**	**5.1134**	**0.2872**	**5.4006**		**24,284.4568**	**24,284.4568**	**1.4218**	**0.0265**	**24,327.9093**

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	1.9000	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Energy	0.1139	1.0352	0.8695	6.2100e-003		0.0787	0.0787		0.0787	0.0787		1,242.1872	1,242.1872	0.0238	0.0228	1,249.5689
Mobile	11.1637	42.6556	99.6368	0.2252	19.1312	0.2096	19.3408	5.1134	0.1953	5.3087		22,836.8986	22,836.8986	1.3937		22,871.7399
Total	**13.1775**	**43.6914**	**100.5778**	**0.2314**	**19.1312**	**0.2886**	**19.4198**	**5.1134**	**0.2742**	**5.3876**		**24,079.2391**	**24,079.2391**	**1.4179**	**0.0228**	**24,121.4721**

	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	N20	CO2e
Percent Reduction	**0.14**	**0.39**	**0.14**	**0.44**	**0.00**	**4.31**	**0.07**	**0.00**	**4.53**	**0.24**	**0.00**	**0.85**	**0.85**	**0.28**	**14.20**	**0.85**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/1/2021	4/13/2021	5	9	
2	Grading	Grading	4/14/2021	5/6/2021	5	17	
3	Building Construction	Building Construction	5/7/2021	2/9/2022	5	199	
4	Paving	Paving	2/10/2022	3/4/2022	5	17	
5	Architectural Coating	Architectural Coating	3/7/2022	3/29/2022	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.61

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 116,550; Non-Residential Outdoor: 38,850; Striped Parking Area: 14,952 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	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

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
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	136.00	54.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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	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		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**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.2 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	0.0664	0.0456	0.4593	1.2200e-003	0.1369	9.2000e-004	0.1379	0.0363	8.5000e-004	0.0372		121.1696	121.1696	3.2300e-003		121.2503
Total	**0.0664**	**0.0456**	**0.4593**	**1.2200e-003**	**0.1369**	**9.2000e-004**	**0.1379**	**0.0363**	**8.5000e-004**	**0.0372**		**121.1696**	**121.1696**	**3.2300e-003**		**121.2503**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			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**	**8.1298**	**2.0445**	**10.1743**	**4.4688**	**1.8809**	**6.3497**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.2 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	0.0664	0.0456	0.4593	1.2200e-003	0.1369	9.2000e-004	0.1379	0.0363	8.5000e-004	0.0372		121.1696	121.1696	3.2300e-003		121.2503
Total	**0.0664**	**0.0456**	**0.4593**	**1.2200e-003**	**0.1369**	**9.2000e-004**	**0.1379**	**0.0363**	**8.5000e-004**	**0.0372**		**121.1696**	**121.1696**	**3.2300e-003**		**121.2503**

3.3 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					6.6459	0.0000	6.6459	3.3776	0.0000	3.3776			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.6459**	**1.1599**	**7.8058**	**3.3776**	**1.0671**	**4.4447**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.3 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	0.0000	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	0.0554	0.0380	0.3827	1.0100e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		100.9746	100.9746	2.6900e-003		101.0419
Total	**0.0554**	**0.0380**	**0.3827**	**1.0100e-003**	**0.1141**	**7.7000e-004**	**0.1149**	**0.0303**	**7.1000e-004**	**0.0310**		**100.9746**	**100.9746**	**2.6900e-003**		**101.0419**

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					2.9907	0.0000	2.9907	1.5199	0.0000	1.5199			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.9907**	**1.1599**	**4.1506**	**1.5199**	**1.0671**	**2.5870**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.3 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	0.0000	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	0.0554	0.0380	0.3827	1.0100e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		100.9746	100.9746	2.6900e-003		101.0419
Total	**0.0554**	**0.0380**	**0.3827**	**1.0100e-003**	**0.1141**	**7.7000e-004**	**0.1149**	**0.0303**	**7.1000e-004**	**0.0310**		**100.9746**	**100.9746**	**2.6900e-003**		**101.0419**

3.4 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**

3.4 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	0.1768	5.5130	1.6063	0.0130	0.3249	0.0158	0.3407	0.0935	0.0151	0.1086		1,375.6612	1,375.6612	0.0836		1,377.7505
Worker	0.5020	0.3446	3.4702	9.1900e-003	1.0346	6.9800e-003	1.0415	0.2744	6.4300e-003	0.2809		915.5034	915.5034	0.0244		916.1133
Total	**0.6787**	**5.8576**	**5.0765**	**0.0222**	**1.3595**	**0.0228**	**1.3823**	**0.3679**	**0.0215**	**0.3895**		**2,291.1645**	**2,291.1645**	**0.1080**		**2,293.8638**

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**

3.4 Building Construction - 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	0.1768	5.5130	1.6063	0.0130	0.3249	0.0158	0.3407	0.0935	0.0151	0.1086		1,375.6612	1,375.6612	0.0836		1,377.7505
Worker	0.5020	0.3446	3.4702	9.1900e-003	1.0346	6.9800e-003	1.0415	0.2744	6.4300e-003	0.2809		915.5034	915.5034	0.0244		916.1133
Total	**0.6787**	**5.8576**	**5.0765**	**0.0222**	**1.3595**	**0.0228**	**1.3823**	**0.3679**	**0.0215**	**0.3895**		**2,291.1645**	**2,291.1645**	**0.1080**		**2,293.8638**

3.4 Building Construction - 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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 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	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	0.1641	5.2321	1.4814	0.0129	0.3249	0.0139	0.3388	0.0935	0.0133	0.1068		1,363.4378	1,363.4378	0.0812		1,365.4678
Worker	0.4694	0.3098	3.1822	8.8600e-003	1.0346	6.8000e-003	1.0414	0.2744	6.2700e-003	0.2807		882.7237	882.7237	0.0219		883.2708
Total	**0.6335**	**5.5419**	**4.6636**	**0.0217**	**1.3594**	**0.0207**	**1.3801**	**0.3679**	**0.0196**	**0.3875**		**2,246.1616**	**2,246.1616**	**0.1031**		**2,248.7386**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 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	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	0.1641	5.2321	1.4814	0.0129	0.3249	0.0139	0.3388	0.0935	0.0133	0.1068		1,363.4378	1,363.4378	0.0812		1,365.4678
Worker	0.4694	0.3098	3.1822	8.8600e-003	1.0346	6.8000e-003	1.0414	0.2744	6.2700e-003	0.2807		882.7237	882.7237	0.0219		883.2708
Total	**0.6335**	**5.5419**	**4.6636**	**0.0217**	**1.3594**	**0.0207**	**1.3801**	**0.3679**	**0.0196**	**0.3875**		**2,246.1616**	**2,246.1616**	**0.1031**		**2,248.7386**

3.5 Paving - 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	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9674**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.5 Paving - 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	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	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		97.3592	97.3592	2.4100e-003		97.4196
Total	**0.0518**	**0.0342**	**0.3510**	**9.8000e-004**	**0.1141**	**7.5000e-004**	**0.1149**	**0.0303**	**6.9000e-004**	**0.0310**		**97.3592**	**97.3592**	**2.4100e-003**		**97.4196**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9674**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.5 Paving - 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	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	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		97.3592	97.3592	2.4100e-003		97.4196
Total	**0.0518**	**0.0342**	**0.3510**	**9.8000e-004**	**0.1141**	**7.5000e-004**	**0.1149**	**0.0303**	**6.9000e-004**	**0.0310**		**97.3592**	**97.3592**	**2.4100e-003**		**97.4196**

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	30.5575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**30.7620**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 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	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	0.0932	0.0615	0.6318	1.7600e-003	0.2054	1.3500e-003	0.2067	0.0545	1.2400e-003	0.0557		175.2466	175.2466	4.3400e-003		175.3552
Total	**0.0932**	**0.0615**	**0.6318**	**1.7600e-003**	**0.2054**	**1.3500e-003**	**0.2067**	**0.0545**	**1.2400e-003**	**0.0557**		**175.2466**	**175.2466**	**4.3400e-003**		**175.3552**

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					
Archit. Coating	30.5575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**30.7620**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 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	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	0.0932	0.0615	0.6318	1.7600e-003	0.2054	1.3500e-003	0.2067	0.0545	1.2400e-003	0.0557		175.2466	175.2466	4.3400e-003		175.3552
Total	**0.0932**	**0.0615**	**0.6318**	**1.7600e-003**	**0.2054**	**1.3500e-003**	**0.2067**	**0.0545**	**1.2400e-003**	**0.0557**		**175.2466**	**175.2466**	**4.3400e-003**		**175.3552**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	11.1637	42.6556	99.6368	0.2252	19.1312	0.2096	19.3408	5.1134	0.1953	5.3087		22,836.8986	22,836.8986	1.3937		22,871.7399
Unmitigated	11.1637	42.6556	99.6368	0.2252	19.1312	0.2096	19.3408	5.1134	0.1953	5.3087		22,836.8986	22,836.8986	1.3937		22,871.7399

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Bank (with Drive-Through)	626.51	343.36	160.82	364,610	364,610
Day-Care Center	986.96	77.85	92.58	647,953	647,953
Fast Food Restaurant with Drive Thru	4,382.40	5,998.88	5715.20	3,318,388	3,318,388
Health Club	1,392.59	829.96	1347.78	1,803,477	1,803,477
High Turnover (Sit Down Restaurant)	1,053.00	1,233.53	1301.63	990,170	990,170
Parking Lot	0.00	0.00	0.00		
Strip Mall	391.52	349.28	215.12	443,037	443,037
Total	8,832.98	8,832.86	8,833.12	7,567,634	7,567,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Bank (with Drive-Through)	10.00	5.00	6.50	6.60	74.40	19.00	27	26	47
Day-Care Center	10.00	5.00	6.50	12.70	82.30	5.00	28	58	14
Fast Food Restaurant with Drive	10.00	5.00	6.50	2.20	78.80	19.00	29	21	50
Health Club	10.00	5.00	6.50	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down	10.00	5.00	6.50	8.50	72.50	19.00	37	20	43
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Strip Mall	10.00	5.00	6.50	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Bank (with Drive-Through)	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Day-Care Center	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Fast Food Restaurant with Drive Thru	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Health Club	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
High Turnover (Sit Down Restaurant)	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Strip Mall	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Natomas Town Center East - Sacramento 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					
NaturalGas Mitigated	0.1139	1.0352	0.8695	6.2100e-003		0.0787	0.0787		0.0787	0.0787		1,242.1872	1,242.1872	0.0238	0.0228	1,249.5689
NaturalGas Unmitigated	0.1327	1.2062	1.0132	7.2400e-003		0.0917	0.0917		0.0917	0.0917		1,447.4048	1,447.4048	0.0277	0.0265	1,456.0060

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					
Bank (with Drive-Through)	375.76	4.0500e-003	0.0368	0.0309	2.2000e-004		2.8000e-003	2.8000e-003		2.8000e-003	2.8000e-003		44.2070	44.2070	8.5000e-004	8.1000e-004	44.4697
Day-Care Center	504.625	5.4400e-003	0.0495	0.0416	3.0000e-004		3.7600e-003	3.7600e-003		3.7600e-003	3.7600e-003		59.3677	59.3677	1.1400e-003	1.0900e-003	59.7205
Fast Food Restaurant with Drive Thru	3894.79	0.0420	0.3818	0.3208	2.2900e-003		0.0290	0.0290		0.0290	0.0290		458.2111	458.2111	8.7800e-003	8.4000e-003	460.9340
Health Club	3757.6	0.0405	0.3684	0.3095	2.2100e-003		0.0280	0.0280		0.0280	0.0280		442.0703	442.0703	8.4700e-003	8.1000e-003	444.6973
High Turnover (Sit Down Restaurant)	3651.37	0.0394	0.3580	0.3007	2.1500e-003		0.0272	0.0272		0.0272	0.0272		429.5729	429.5729	8.2300e-003	7.8800e-003	432.1257
Parking Lot	0	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
Strip Mall	118.795	1.2800e-003	0.0117	9.7800e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004		13.9758	13.9758	2.7000e-004	2.6000e-004	14.0589
Total		**0.1327**	**1.2062**	**1.0132**	**7.2400e-003**		**0.0917**	**0.0917**		**0.0917**	**0.0917**		**1,447.4049**	**1,447.4049**	**0.0277**	**0.0265**	**1,456.0060**

5.2 Energy by Land Use - NaturalGas

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	lb/day										lb/day					
Bank (with Drive-Through)	0.302129	3.2600e-003	0.0296	0.0249	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003		35.5446	35.5446	6.8000e-004	6.5000e-004	35.7559
Day-Care Center	0.359785	3.8800e-003	0.0353	0.0296	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003		42.3277	42.3277	8.1000e-004	7.8000e-004	42.5792
Fast Food Restaurant with Drive Thru	3.50251	0.0378	0.3434	0.2884	2.0600e-003		0.0261	0.0261		0.0261	0.0261		412.0600	412.0600	7.9000e-003	7.5500e-003	414.5086
Health Club	3.02129	0.0326	0.2962	0.2488	1.7800e-003		0.0225	0.0225		0.0225	0.0225		355.4462	355.4462	6.8100e-003	6.5200e-003	357.5585
High Turnover (Sit Down Restaurant)	3.2836	0.0354	0.3219	0.2704	1.9300e-003		0.0245	0.0245		0.0245	0.0245		386.3062	386.3062	7.4000e-003	7.0800e-003	388.6018
Parking Lot	0	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
Strip Mall	0.0892712	9.6000e-004	8.7500e-003	7.3500e-003	5.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		10.5025	10.5025	2.0000e-004	1.9000e-004	10.5649
Total		**0.1139**	**1.0352**	**0.8695**	**6.2100e-003**		**0.0787**	**0.0787**		**0.0787**	**0.0787**		**1,242.1872**	**1,242.1872**	**0.0238**	**0.0228**	**1,249.5689**

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	1.9000	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Unmitigated	1.9000	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634

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	0.1423					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7511					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.6300e-003	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Total	**1.9000**	**6.5000e-004**	**0.0715**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**		**0.1534**	**0.1534**	**4.0000e-004**		**0.1634**

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	0.1423					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7511					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.6300e-003	6.5000e-004	0.0715	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1534	0.1534	4.0000e-004		0.1634
Total	**1.9000**	**6.5000e-004**	**0.0715**	**1.0000e-005**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**		**0.1534**	**0.1534**	**4.0000e-004**		**0.1634**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Regional Construction Emissions Worksheet* - Unmitigated

*CalEEMod, Version 2016.3.2

Site Preparation

		lbs/day				lbs/day			tons/year			lbs/day			tons/year		
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	**2021**																
Fugitive Dust						8.13	0.00	8.13	0.04	0.00	0.04	4.47	0.00	4.47	0.02	0.00	0.02
Off-Road		3.89	40.50	21.15	0.04		2.04	2.04		0.01	0.01		1.88	1.88		0.01	0.01
Total		**3.89**	**40.50**	**21.15**	**0.04**	**8.13**	**2.04**	**10.17**	**0.04**	**0.01**	**0.05**	**4.47**	**1.88**	**6.35**	**0.02**	**0.01**	**0.03**
Offsite																	
Hauling		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker		0.07	0.04	0.54	0.00	0.14	0.00	0.14	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00
Total		**0.07**	**0.04**	**0.54**	**0.00**	**0.14**	**0.00**	**0.14**	**0.00**	**0.00**	**0.00**	**0.04**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**
TOTAL		***3.96***	***40.53***	***21.69***	***0.04***	***8.27***	***2.05***	***10.31***	***0.04***	***0.01***	***0.05***	***4.51***	***1.88***	***6.39***	***0.02***	***0.01***	***0.03***

Grading

		lbs/day				lbs/day			tons/year			lbs/day			tons/year		
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	**2021**																
Fugitive Dust						2.99	0.00	2.99	0.03	0.00	0.03	1.52	0.00	1.52	0.01	0.00	0.01
Off-Road		2.29	24.74	15.86	0.03		1.16	1.16		0.01	0.01		1.07	1.07		0.01	0.01
Total		**2.29**	**24.74**	**15.86**	**0.03**	**2.99**	**1.16**	**4.15**	**0.03**	**0.01**	**0.04**	**1.52**	**1.07**	**2.59**	**0.01**	**0.01**	**0.02**
Offsite																	
Hauling		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker		0.06	0.03	0.45	0.00	0.11	0.00	0.11	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00
Total		**0.06**	**0.03**	**0.45**	**0.00**	**0.11**	**0.00**	**0.11**	**0.00**	**0.00**	**0.00**	**0.03**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**
TOTAL		***2.35***	***24.77***	***16.31***	***0.03***	***3.10***	***1.16***	***4.27***	***0.03***	***0.01***	***0.04***	***1.55***	***1.07***	***2.62***	***0.01***	***0.01***	***0.02***

Building Construction

		lbs/day				lbs/day			tons/year			lbs/day			tons/year		
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	**2021**																
Off-Road		1.90	17.43	16.58	0.03		0.96	0.96		0.08	0.08		0.90	0.90		0.08	0.08
Total		**1.90**	**17.43**	**16.58**	**0.03**		**0.96**	**0.96**		**0.08**	**0.08**		**0.90**	**0.90**		**0.08**	**0.08**
Offsite																	
Hauling		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor		0.17	5.42	1.39	0.01	0.32	0.01	0.34	0.03	0.00	0.03	0.09	0.01	0.11	0.01	0.00	0.01
Worker		0.55	0.28	4.07	0.01	1.03	0.01	1.04	0.09	0.00	0.09	0.27	0.01	0.28	0.02	0.00	0.02
Total		**0.71**	**5.70**	**5.45**	**0.02**	**1.36**	**0.02**	**1.38**	**0.11**	**0.00**	**0.11**	**0.37**	**0.02**	**0.39**	**0.03**	**0.00**	**0.03**
TOTAL		***2.61***	***23.13***	***22.03***	***0.05***	***1.36***	***0.98***	***2.34***	***0.11***	***0.08***	***0.20***	***0.37***	***0.92***	***1.29***	***0.03***	***0.08***	***0.11***
Onsite	**2022**																
Off-Road		1.71	15.62	16.36	0.03		0.81	0.81		0.01	0.01		0.76	0.76		0.01	0.01
Total		**1.71**	**15.62**	**16.36**	**0.03**		**0.81**	**0.81**		**0.01**	**0.01**		**0.76**	**0.76**		**0.01**	**0.01**
Offsite																	
Hauling		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor		0.15	5.16	1.28	0.01	0.32	0.01	0.34	0.00	0.00	0.00	0.09	0.01	0.11	0.00	0.00	0.00
Worker		0.51	0.25	3.75	0.01	1.03	0.01	1.04	0.01	0.00	0.01	0.27	0.01	0.28	0.00	0.00	0.00
Total		**0.66**	**5.41**	**5.02**	**0.02**	**1.36**	**0.02**	**1.38**	**0.02**	**0.00**	**0.02**	**0.37**	**0.02**	**0.39**	**0.01**	**0.00**	**0.01**
TOTAL		***2.37***	***21.02***	***21.39***	***0.05***	***1.36***	***0.83***	***2.19***	***0.02***	***0.01***	***0.03***	***0.37***	***0.78***	***1.15***	***0.01***	***0.01***	***0.02***
Onsite	**2021-2022**																
Off-Road		1.90	17.43	16.58	0.03	0.00	0.96	0.96	0.00	0.08	0.08	0.00	0.90	0.90	0.00	0.08	0.08
Total		1.90	17.43	16.58	0.03	0.00	0.96	0.96	0.00	0.08	0.08	0.00	0.90	0.90	0.00	0.08	0.08
Offsite																	
Hauling		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor		0.17	5.42	1.39	0.01	0.32	0.01	0.34	0.03	0.00	0.03	0.09	0.01	0.11	0.01	0.00	0.01
Worker		0.55	0.28	4.07	0.01	1.03	0.01	1.04	0.09	0.00	0.09	0.27	0.01	0.28	0.02	0.00	0.02
Total		0.71	5.70	5.45	0.02	1.36	0.02	1.38	0.11	0.00	0.11	0.37	0.02	0.39	0.03	0.00	0.03
TOTAL		***2.61***	***23.13***	***22.03***	***0.05***	***1.36***	***0.98***	***2.34***	***0.11***	***0.08***	***0.20***	***0.37***	***0.92***	***1.29***	***0.03***	***0.08***	***0.11***

Paving

		lbs/day				lbs/day			tons/year			lbs/day			tons/year		
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	**2022**																
Off-Road		1.10	11.12	14.58	0.02		0.57	0.57		0.00	0.00		0.52	0.52		0.00	0.00
Paving		0.86					0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00
Total		1.97	11.12	14.58	0.02		0.57	0.57		**0.00**	**0.00**		0.52	0.52		**0.00**	**0.00**
Offsite																	
Hauling		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker		0.06	0.03	0.41	0.00	0.11	0.00	0.11	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00
Total		0.06	0.03	0.41	0.00	0.11	0.00	0.11	**0.00**	**0.00**	**0.00**	0.03	0.00	0.03	**0.00**	**0.00**	**0.00**
TOTAL		***2.02***	***11.15***	***14.99***	***0.02***	***0.11***	***0.57***	***0.68***	***0.00***	***0.00***	***0.01***	***0.03***	***0.52***	***0.55***	***0.00***	***0.00***	***0.00***

Architectural Coating

		lbs/day				lbs/day			tons/year			lbs/day			tons/year		
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Onsite	**2022**																
Archit. Coating		30.56					0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00
Off-Road		0.20	1.41	1.81	0.00		0.08	0.08		0.00	0.00		0.08	0.08		0.00	0.00
Total		30.76	1.41	1.81	0.00		0.08	0.08		**0.00**	**0.00**		0.08	0.08		**0.00**	**0.00**
Offsite																	
Hauling		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker		0.10	0.05	0.74	0.00	0.21	0.00	0.21	0.00	0.00	0.00	0.05	0.00	0.06	0.00	0.00	0.00
Total		0.10	0.05	0.74	0.00	0.21	0.00	0.21	**0.00**	**0.00**	**0.00**	0.05	0.00	0.06	**0.00**	**0.00**	**0.00**
TOTAL		***30.86***	***1.46***	***2.56***	***0.00***	***0.21***	***0.08***	***0.29***	***0.00***	***0.00***	***0.00***	***0.05***	***0.08***	***0.14***	***0.00***	***0.00***	***0.00***

MAX DAILY		**31**	**41**	**22**	**0**	**8**	**2**	**10**	**0**	**0**	**0**	**5**	**2**	**6**	**0**	**0**	**0**
Regional Thresholds		**NA**	**85**	**NA**	**NA**	**NA**	**NA**	**80**	**NA**	**NA**	**14.6**	**NA**	**NA**	**82**	**NA**	**NA**	**15**
Exceeds Thresholds?		No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No

Regional Operation Emissions Worksheet* - Unmitigated

*CalEEMod, Version 2016.3.2 and EMFAC2017, Version 1.0.2

Proposed Project

			lbs/day			lbs/day			tons/year			lbs/day			tons/year		
Summer	**ROG**	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**
Area	1.90	0.00	0.07	0.00		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00
Energy	0.11	1.04	0.87	0.01		0.08	0.08		0.02	0.02		0.08	0.08		0.02	0.02
Mobile	16.13	41.35	93.83	0.25	19.13	0.20	19.34	2.82	0.03	2.85	5.11	0.19	5.30	0.76	0.03	0.79
Total	**18.14**	**42.39**	**94.77**	**0.25**	**19.13**	**0.28**	**19.41**	**2.82**	**0.05**	**2.87**	**5.11**	**0.27**	**5.38**	**0.76**	**0.05**	**0.80**
Max Daily																
	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**
Area	1.90	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.11	1.04	0.87	0.01	0.00	0.08	0.08	0.00	0.02	0.02	0.00	0.08	0.08	0.00	0.02	0.02
Mobile	16.13	41.35	93.83	0.25	19.13	0.20	19.34	2.82	0.03	2.85	5.11	0.19	5.30	0.76	0.03	0.79
Total	**18.14**	**42.39**	**94.77**	**0.25**	**19.13**	**0.28**	**19.41**	**2.82**	**0.05**	**2.87**	**5.11**	**0.27**	**5.38**	**0.76**	**0.05**	**0.80**
Regional Thresholds	**65**	**65**	**NA**	**NA**	**NA**	**NA**	**80**	**NA**	**NA**	**14.6**	**NA**	**NA**	**82**	**NA**	**NA**	**15**
Exceeds Thresholds?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No

GHG Emissions Inventory

Proposed Project Buildout

Site Preparation

Construction

	$MTCO_2e$ Total*
2021	420
2022	83
Total Construction	**503**

*CalEEMod, Version 2016.3.2.

Operation*

Proposed			
Area	**0.018500**	$MTCO_2e$/Year**	0.000463%
Energy	**504.180900**	$MTCO_2e$/Year	12.6%
Mobile	**3,242**	$MTCO_2e$/Year	81.2%
Solid Waste	**215**	$MTCO_2e$/Year	5.4%
Water	**13.080000**	$MTCO_2e$/Year	0.3%
Construction amoritized over 25-years	**20**	$MTCO_2e$/Year	0.5%
Total	**3,994**	**$MTCO_2e$/Year**	100.0%

*CalEEMod, Version 2016.3.2.

** $MTCO_2e$=metric tons of carbon dioxide equivalent.

Emission Factors

Electricity Emission Factors

2014 SMUD ELECTRICITY EF	Amount	Units	Source
CO2	561.08	lb/MWh	Martha Helek, SMUD, email communication to Dimitri Antoniou of Ascent Environmental on June 28, 2016
CH4	0.014116	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
N20	0.002572	lb/MWh	Calculated from eGrid 2012 (Updated October 2015)
2020 SMUD ELECTRICITY EF			
CO2	514.9638	lb/MWh	33% RPS
CH4	0.012956	lb/MWh	
N20	0.00236	lb/MWh	
2023 SMUD ELECTRICITY EF			
CO2	449.6326	lb/MWh	41.50%
CH4	0.011312	lb/MWh	
N20	0.002061	lb/MWh	
2026 SMUD ELECTRICITY EF			50% RPS
CO2	384.3014	lb/MWh	
CH4	0.009668	lb/MWh	
N20	0.001762	lb/MWh	
2030 SMUD ELECTRICITY EF			60% RPS
CO2	307.4411	lb/MWh	
CH4	0.007735	lb/MWh	
N20	0.001409	lb/MWh	
Natural Gas Emission Factors*			
	53.06	kg CO2/MMBtu	2017 Default Emission Factors Table 12.1
	0.001	kg CH4/MMBtu	2017 Default Emission Factors Table 12.9
	0.0001	kg N2O/MMBtu	2017 Default Emission Factors Table 12.9
Diesel Emission Factors*			
	10.21	kg CO2/gal	2017 Default Emission Facotrs Table 13.1
	0.00006	kg CH4/gal	2017 Default Emission Factors Table 13.7
	0.00045	kg N2O/gal	2017 Default Emission Factors Table 13.7
Conversion Factors			
lb/MT	2204.623		
BTU/ft^3	1000		
BTU/MMBTU	1000000		
MT/kg	0.001		
g/lb	453.592		
lb jet fuel/gallon	6.79		

* https://www.theclimateregistry.org/wp-content/uploads/2018/06/The-Climate-Registry-2018-Default-Emission-Factor-Document.pdf

Energy Calculations Summary

Operational Fuel Use Summary

Fuel Type	Fleet Mix (%)	Gallons per Mile	Annual VMT	Gallons
Gasoline	97.16%	0.04	7,567,634	278,310
Diesel	2.84%	0.10		20,856

Notes:

1. Fleet mix calculated from CalEEMod default values.
2. Gallons per mile calculated from EMFAC 2017.
3. Annual VMT obtained from CalEEMod output file.

Operational Energy Summary

Land Use	Natural Gas kBTU/year	Natural Gas therm/year	Electricity kWh/year	Electricity MWh/year	Diesel gallons/year
Bank (with Drive-Through)	110,277	110	54,221	54	
Day-Care Center	131,322	131	80,929	81	
Fast Food Restaurant with Drive Thru	1,278,420	1,278	312,560	313	
Health Club	1,102,770	1,103	542,213	542	
High Turnover (Sit Down Restaurant)	1,198,520	1,199	293,025	293	
Parking Lot	0	0	87,220	87	
Strip Mall	32,584	33	84,736	85	
Total	**3,853,893**	**3,854**	**1,454,905**	**1,455**	**0**

therm/kbtu	100.000000
kBTU/MMBT	1000

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Trips	Gasoline Fuel Consumption	Diesel Fuel Consumption
				miles/hr		vehicles	miles/day	trips/day	1,000 gallons/day	1,000 gallons/day
SACRAMEI	2023	All Other Buses	Aggregate	Aggregate	DSL	432.3095727	23330.99883	3631.40041	0	2.523180073
SACRAMEI	2023	LDA	Aggregate	Aggregate	GAS	606308.3182	21470907.57	2835871.384	665.4181032	0
SACRAMEI	2023	LDA	Aggregate	Aggregate	DSL	5931.129271	213255.1918	27679.16982	0	4.088383615
SACRAMEI	2023	LDA	Aggregate	Aggregate	ELEC	11992.87168	495863.451	59658.61958	0	0
SACRAMEI	2023	LDT1	Aggregate	Aggregate	GAS	65368.82489	2148247.633	297348.0731	77.95506082	0.00
SACRAMEI	2023	LDT1	Aggregate	Aggregate	DSL	171.8027759	2906.858044	624.5733541	0	0.132639767
SACRAMEI	2023	LDT1	Aggregate	Aggregate	ELEC	520.3596655	21554.13651	2582.693036	0	0
SACRAMEI	2023	LDT2	Aggregate	Aggregate	GAS	210187.0401	7110545.533	970164.8507	277.9033637	0.00
SACRAMEI	2023	LDT2	Aggregate	Aggregate	DSL	1241.047612	49360.09086	6058.386505	0	1.285363939
SACRAMEI	2023	LDT2	Aggregate	Aggregate	ELEC	2017.989173	64372.67262	10165.33975	0	0
SACRAMEI	2023	LHD1	Aggregate	Aggregate	GAS	16570.84786	539163.4195	246880.9426	64.08642368	0.00
SACRAMEI	2023	LHD1	Aggregate	Aggregate	DSL	14242.93915	481067.9853	179158.2569	0	26.45912717
SACRAMEI	2023	LHD2	Aggregate	Aggregate	GAS	2262.201873	74699.66463	33703.43723	10.13554171	0.00
SACRAMEI	2023	LHD2	Aggregate	Aggregate	DSL	4802.260083	166508.7652	60406.3906	0	10.23389815
SACRAMEI	2023	MCY	Aggregate	Aggregate	GAS	30303.87519	203769.6783	60607.75038	5.439457816	0.00
SACRAMEI	2023	MDV	Aggregate	Aggregate	GAS	150190.4674	4749353.976	681491.928	228.4181027	0.00
SACRAMEI	2023	MDV	Aggregate	Aggregate	DSL	3183.545596	120771.4496	15325.08903	0	4.182416763
SACRAMEI	2023	MDV	Aggregate	Aggregate	ELEC	1127.725787	36901.45816	5725.011233	0	0.00
SACRAMEI	2023	MH	Aggregate	Aggregate	GAS	2990.83134	25478.2097	299.2027673	5.282504092	0.00
SACRAMEI	2023	MH	Aggregate	Aggregate	DSL	1076.008878	9299.845971	107.6008878	0	0.942714401
SACRAMEI	2023	Motor Coach	Aggregate	Aggregate	DSL	99.86095166	14071.10756	1457.969894	0	2.151954575
SACRAMEI	2023	OBUS	Aggregate	Aggregate	GAS	560.2050231	24124.38457	11208.5821	5.0980697	0.00
SACRAMEI	2023	PTO	Aggregate	Aggregate	DSL	0	22179.20995	0	0	4.107588655
SACRAMEI	2023	SBUS	Aggregate	Aggregate	GAS	126.484672	6096.481673	505.9386881	0.635020485	0.00
SACRAMEI	2023	SBUS	Aggregate	Aggregate	DSL	1040.458767	32508.30405	12006.74991	0	4.062341856
SACRAMEI	2023	T6 Ag	Aggregate	Aggregate	DSL	16.07611351	207.8508992	70.73489945	0	0.02271267
SACRAMEI	2023	T6 CAIRP heavy	Aggregate	Aggregate	DSL	112.1187876	21881.03302	1636.934299	0	1.879378221
SACRAMEI	2023	T6 CAIRP small	Aggregate	Aggregate	DSL	60.92954854	3190.303004	889.5714086	0	0.292470329
SACRAMEI	2023	T6 instate construction he	Aggregate	Aggregate	DSL	200.3538485	13192.90503	905.7919595	0	1.547739527
SACRAMEI	2023	T6 instate construction sm	Aggregate	Aggregate	DSL	1725.534921	96787.53918	7801.076289	0	11.27863138
SACRAMEI	2023	T6 instate heavy	Aggregate	Aggregate	DSL	1384.477948	187980.5236	15976.68357	0	17.7361536
SACRAMEI	2023	T6 instate small	Aggregate	Aggregate	DSL	5035.969884	260027.6824	58114.39425	0	25.9184952
SACRAMEI	2023	T6 OOS heavy	Aggregate	Aggregate	DSL	62.98831219	12260.01049	919.6293579	0	1.053814619
SACRAMEI	2023	T6 OOS small	Aggregate	Aggregate	DSL	33.227138	1720.233994	485.1162148	0	0.158122572
SACRAMEI	2023	T6 Public	Aggregate	Aggregate	DSL	4468.182932	69648.00524	13553.48821	0	9.307596485
SACRAMEI	2023	T6 utility	Aggregate	Aggregate	DSL	175.4286338	2940.509141	2017.429289	0	0.31623806
SACRAMEI	2023	T6TS	Aggregate	Aggregate	GAS	2071.192563	97303.04219	41440.4208	20.40968443	0
SACRAMEI	2023	T7 Ag	Aggregate	Aggregate	DSL	11.91009728	151.031424	52.40442805	0	0.02655698
SACRAMEI	2023	T7 CAIRP	Aggregate	Aggregate	DSL	848.0909017	154330.8125	12382.12717	0	22.05282278
SACRAMEI	2023	T7 CAIRP construction	Aggregate	Aggregate	DSL	51.96952928	9476.57829	234.9522213	0	1.571996863
SACRAMEI	2023	T7 NNOOS	Aggregate	Aggregate	DSL	952.1692008	188153.8535	13901.67033	0	25.60613496
SACRAMEI	2023	T7 NOOS	Aggregate	Aggregate	DSL	336.1066512	60637.58402	4907.157107	0	8.879166604
SACRAMEI	2023	T7 other port	Aggregate	Aggregate	DSL	10.34874244	1777.383531	78.65044251	0	0.284499884
SACRAMEI	2023	T7 POAK	Aggregate	Aggregate	DSL	45.7542058	5550.890755	347.7319641	0	0.923357604
SACRAMEI	2023	T7 Public	Aggregate	Aggregate	DSL	4682.133958	94808.82811	14202.47299	0	17.53829543
SACRAMEI	2023	T7 Single	Aggregate	Aggregate	DSL	1507.417653	111698.9345	17395.39072	0	16.14426322
SACRAMEI	2023	T7 single construction	Aggregate	Aggregate	DSL	338.7823141	23509.64771	1531.62167	0	4.120947087
SACRAMEI	2023	T7 SWCV	Aggregate	Aggregate	DSL	549.8796844	22429.39399	2144.530769	0	8.909085569
SACRAMEI	2023	T7 SWCV	Aggregate	Aggregate	NG	298.5022828	12165.00682	1164.158903	5.086491692	0
SACRAMEI	2023	T7 tractor	Aggregate	Aggregate	DSL	843.5275577	115843.1119	10712.79998	0	14.80517215
SACRAMEI	2023	T7 tractor construction	Aggregate	Aggregate	DSL	284.6932222	19393.38955	1287.086989	0	3.416629408
SACRAMEI	2023	T7 utility	Aggregate	Aggregate	DSL	24.74590018	502.0886277	284.577852	0	0.084366195
SACRAMEI	2023	T7IS	Aggregate	Aggregate	GAS	4.126049466	370.9548753	82.55399772	0.082755756	0
SACRAMEI	2023	UBUS	Aggregate	Aggregate	GAS	202.3269907	15275.52487	809.307963	3.561692379	0
SACRAMEI	2023	UBUS	Aggregate	Aggregate	DSL	2.109856914	135.6226039	8.439427656	0	0.015578662
SACRAMEI	2023	UBUS	Aggregate	Aggregate	ELEC	0.002191142	0.046907578	0.00876457	0	0
SACRAMEI	2023	UBUS	Aggregate	Aggregate	NG	430.8103582	41217.30899	1723.241433	10.68167526	0

TOTAL	39,750,906		1380.19	254.06	24.3	0.04
Total (Gas)	36,465,336				26.4	0.04
Total (Diesel)	2,613,496				10.3	0.10

Annual VMT
7,567,634

	Mix (%)	Miles	Gallons
Gas	97.2%	7,353,084	278,310
Diesel	2.8%	214,542	20,856

Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
All Project Land Uses	0.562895	0.037862	0.20722	0.11557	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

Gas	97.2%
Diesel	2.8%

2021-2022 Construction Offroad Equipment

2021

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of days	Average Daily Factor	Diesel Fuel Usage
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40	9	0.6	640
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37	9	0.6	310
Grading	Excavators	1	8.00	158	0.38	17	0.6	245
Grading	Graders	1	8.00	187	0.41	17	0.6	313
Grading	Rubber Tired Dozers	1	8.00	247	0.40	17	0.6	403
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37	17	0.6	439
Building Construction	Cranes	1	7.00	231	0.29	171	0.6	2,406
Building Construction	Forklifts	3	8.00	89	0.20	171	0.6	2,192
Building Construction	Generator Sets	1	8.00	84	0.74	171	0.6	2,551
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37	171	0.6	3,866
Building Construction	Welders	1	8.00	46	0.45	171	0.6	850
							TOTAL	**14,215**

2022

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of days	Average Daily Factor	Diesel Fuel Usage
Building Construction	Cranes	1	7.00	231	0.29	28	0.6	394
Building Construction	Forklifts	3	8.00	89	0.20	28	0.6	359
Building Construction	Generator Sets	1	8.00	84	0.74	28	0.6	418
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37	28	0.6	633
Building Construction	Welders	1	8.00	46	0.45	28	0.6	139
Paving	Pavers	2	8.00	130	0.42	17	0.6	446
Paving	Paving Equipment	2	8.00	132	0.36	17	0.6	388
Paving	Rollers	2	8.00	80	0.38	17	0.6	248
Architectural Coating	Air Compressors	1	6.00	78	0.48	17	0.6	115
							TOTAL	**3,139**

	Year	Start Date	End Date	Network Days
Site Preparation	2021	4/1/2021	4/13/2021	9
Grading	2021	4/14/2021	5/6/2021	17
Building Construction	2021	5/7/2021	12/31/2021	171
	2022	1/1/2022	2/9/2022	28
Paving	2022	2/10/2022	3/4/2022	17
Architectural Coating	2022	3/7/2022	3/29/2022	17

Trips and VMT

2021

Phase Name	Daily Worker Trip	Days per Year	Total Worker Trips	Total Vendor Trips	Total Hauling Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Haul Trip Length (miles)	Total Worker Trip Length (miles)	Total Vendor Trip Length (miles)	Total Haul Trip Length (miles)	**Total gallons of gasoline**	**Total gallons of diesel**
Site Preparation	18	9	162	0	0	10.00	6.50	20.00	1620	0	0	**58**	**0**
Grading	15	17	255	0	0	10.00	6.50	20.00	2550	0	0	**92**	**0**
Building Construction	136	171	23256	46.40201005	0	10.00	6.50	20.00	232560	301.613065	0	**8,361**	**57**
											TOTAL	**8,511**	**57**

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

2022

Phase Name	Daily Worker Trip	Days per Year	Total Worker Trips	Total Vendor Trips	Total Hauling Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Haul Trip Length (miles)	Total Worker Trip Length (miles)	Total Vendor Trip Length (miles)	Total Haul Trip Length (miles)	**Total gallons of gasoline**	**Total gallons of diesel**
Building Construction	136	28	3808	7.59798995	0	10.00	6.50	20.00	38080	49.3869347	0	**1,332**	**9**
Paving	15	17	255	0	0	10.00	6.50	20.00	2,550.00	0.00	0	**89**	**0**
Architectural Coating	27	17	459	0	0	10.00	6.50	20.00	4,590.00	0.00	0	**161**	**0**
											TOTAL	**1,581**	**9**

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

Energy Calculations Summary

Construction Fuel Usage Summary

Construction Year	Diesel Off-road Equipment (gallons)	Gasoline On-road (gallons)	Diesel On-road (gallons)	Diesel Combined
2021	14,215	8,511	57	14,272
2022	3,139	1,581	9	3,148
TOTAL	**17,353**	**10,092**	**66**	17,420

Total Gasoline	**10,092**	**gallons**
Total Diesel	**17,420**	**gallons**

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed miles/hr	Fuel	Population vehicles	VMT miles/day	Trips trips/day	Fuel gas 1,000 gallons/day	Diesel gas 1,000 gallons/day	Miles per gallon	Gasoline miles per gallon	Diesel miles per gallon
SACRAMEI	2020	LDA	Aggregated	Aggregated	GAS	562308.3977	20379237.88	2622438.143	684.8956964	0.00	29.76	27.07	5.20
SACRAMEI	2020	LDT1	Aggregated	Aggregated	GAS	62565.85469	2093109.763	283205.141	81.82020875	0.00	25.58		
SACRAMEI	2020	LDT2	Aggregated	Aggregated	GAS	200448.9527	7002680.301	925793.3827	301.8261924	0.00	23.20		
SACRAMEI	2020	T7 tractor construction	Aggregated	Aggregated	DSL	245.8322004	17275.95781	1111.39782	0.00	3.319186621	5.20		

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2021
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed miles/hr	Fuel	Population vehicles	VMT miles/day	Trips trips/day	Fuel gas 1,000 gallons/day	Diesel gas 1,000 gallons/day	Miles per gallon	Gasoline miles per gallon	Diesel miles per gallon
SACRAME	2021	LDA	Aggregated	Aggregated	GAS	576916.8631	20787699.97	2693628.523	680.3867171	0.00	30.55	27.82	5.28
SACRAME	2021	LDT1	Aggregated	Aggregated	GAS	63439.28027	2114017.763	287695.6243	80.67265944	0.00	26.20		
SACRAME	2021	LDT2	Aggregated	Aggregated	GAS	203602.0528	7045516.111	940182.7893	294.1321023	0.00	23.95		
SACRAME	2021	T7 tractor construction	Aggregated	Aggregated	DSL	258.7845228	17974.85613	1169.954766	0.00	3.407025315	5.28		

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: County
Region: SACRAMENTO
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed miles/hr	Fuel	Population vehicles	VMT miles/day	Trips trips/day	Fuel gas 1,000 gallons/day	Diesel gas 1,000 gallons/day	Miles per gallon	Gasoline miles per gallon	Diesel miles per gallon
SACRAME	2022	LDA	Aggregated	Aggregated	GAS	591545.2621	21127372.04	2764927.853	673.142382	0.00	31.39	28.59	5.40
SACRAME	2022	LDT1	Aggregated	Aggregated	GAS	64366.14065	2129386.502	292380.935	79.27891431	0.00	26.86		
SACRAME	2022	LDT2	Aggregated	Aggregated	GAS	206880.8861	7073751.275	955128.7989	285.8595601	0.00	24.75		
SACRAME	2022	T7 tractor construction	Aggregated	Aggregated	DSL	270.8028858	18680.66671	1224.289318	0.00	3.460572817	5.40		

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).