

Appendix C

Air Quality Modeling Results

Nishi Construction Emissions Modeling Results Summary

Phase 1				tons/year	tons/year	tons/year	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	MT/Year	MT/Year	MT/Year	MT/Year
Year	Construction Phase	Structures	Model	ROG	NOX	CO	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	CO2	CH4	N2O	CO2e
2017	Demolition	2 structures on West Olive	CalEEMod	0.011	0.110	0.092	8.75	2.82	2.14	2.00	6.61	0.83	10.264	0.003	0.000	10.350
2017	Site Preparation	Removal of on-site vegetation	CalEEMod	0.037	0.390	0.302	23.96	12.81	2.76	2.54	21.20	10.27	28.359	0.008	0.000	28.644
2017	Grading	Grading land use acres	CalEEMod	0.333	3.762	2.569	13.14	6.77	3.32	3.05	9.82	3.72	316.617	0.095	0.000	319.853
2017	Trenching	Installing Utilities (water and electricity)	CalEEMod	0.013	0.114	0.084	2.95	0.95	0.78	0.71	2.17	0.23	10.401	0.003	0.000	10.501
2017	Building Construction	Phase 1 Building Construction	CalEEMod	0.259	2.156	1.783	31.32	3.30	1.89	0.10	29.43	3.20	321.562	0.042	0.000	322.999
2018	Building Construction	Phase 1 Building Construction	CalEEMod	0.444	3.762	3.340	31.03	4.70	1.60	1.50	29.43	3.20	624.484	0.082	0.000	627.265
2019	Building Construction	Phase 1 Building Construction	CalEEMod	0.171	1.466	1.387	30.81	4.50	1.38	1.30	29.43	3.20	265.547	0.035	0.000	266.727
2019	Paving	Phase 1 Building Construction	CalEEMod	0.009	0.052	0.052	3.32	1.02	0.81	0.75	2.51	0.27	7.344	0.002	0.000	7.419
2019	Architectural Coating	Phase 1 Building Construction	CalEEMod	3.486	0.011	0.028	20.19	2.30	0.14	0.13	20.05	2.16	5.046	0.000	0.000	5.056
2018	Construction	Roads	RCEM	0.353	1.921	3.426	24.14	7.93	4.14	3.77	20.00	4.16	352.419			352
2017	Construction	Bridge to West Olive	RCEM	0.223	1.206	2.358	17.49	8.90	7.49	6.82	10.00	2.08	229.361			229

Phase 2				tons/year	tons/year	tons/year	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	MT/Year	MT/Year	MT/Year	MT/Year
Year	Construction Phase	Structures	Model	ROG	NOX	CO	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	CO2	CH4	N2O	CO2e
2019	Grading	Phase 2 Building Construction	CalEEMod	0.326	3.581	2.701	11.95	5.99	2.51	2.31	9.45	3.68	374.203	0.116	0.000	378.153
2020	Building Construction	Phase 2 Building Construction	CalEEMod	0.359	3.053	3.114	30.63	4.33	1.20	1.13	29.43	3.20	602.447	0.079	0.000	605.136
2021	Building Construction	Phase 2 Building Construction	CalEEMod	0.309	2.588	2.871	30.46	4.17	1.03	0.97	29.43	3.20	570.771	0.074	0.000	573.294
2020	Paving	Phase 2 Building Construction	CalEEMod	0.012	0.069	0.074	3.25	0.95	0.74	0.68	2.51	0.27	10.254	0.003	0.000	10.362
2021	Architectural Coating	Phase 2 Building Construction	CalEEMod	3.702	0.010	0.023	12.80	1.47	0.10	0.10	12.70	1.37	4.237	0.000	0.000	4.245
2020	Construction	Underpass	RCEM	0.260	1.749	2.690	15.41	6.99	5.41	4.91	10.00	2.08	335.074			335.074

Construction Year				Total		Exhaust		Fugitive Dust					
	tons/year	tons/year	tons/year	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	MT/Year	MT/Year	MT/Year	MT/Year
	ROG	NOX	CO	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	CO2	CH4	N2O	CO2e
2017	0.87	7.74	7.19	55.46	11.23	6.04	3.87	49.43	7.36	916.564	0.151	0.000	921.708
2018	0.80	5.68	6.77	55.17	12.63	5.74	5.27	49.43	7.36	976.903	0.082	0.000	979.684
2019	3.99	5.11	4.17	30.81	5.99	2.51	2.31	29.43	3.68	652.139	0.153	0.000	657.355
2020	0.63	4.87	5.88	49.28	12.27	7.35	6.72	41.93	5.55	947.774	0.082	0.000	950.572
2021	4.01	2.60	2.89	43.26	5.64	1.13	1.07	42.13	4.57	575.007	0.074	0.000	577.538

CalEEMod = California Emissions Estimator Model v.2013.2.2
RCEM = Road Construction Emissions Model version 7.1.5.1

Nishi Construction Emissions Assumptions

Demolition in Phase 1	Sqft to be demolished
Murder Burger (978 Olive Dr.)	930
946 Olive Dr.	10,107
	11037

Architectural Coating Assumptions (sqft)					
	Residential		Non-Residential		Notes
	Interior	Exterior	Interior	Exterior	
Phase 1	731,025	243,675	240,000	107,214	See Section 4.7 in Appendix A and Section 7 in Appendix E of the CalEEMod User's Guide
Phase 2	761,400	253,800	277,500	109,854	

Building Construction Assumptions					
Phase 1 - Starting in 2017	Amount	Units	Acreage	Calculation Method	Data Source
Office Park	80,000	sqft	1.2	CalEEMod	Nishi Site Plan
Research and Development	80,000	sqft	1.2	CalEEMod	Nishi Site Plan
Mid-Rise Apartments	310	DU	4.7	CalEEMod	Nishi Site Plan
<i>For Sale</i>	100	DU			Nishi Site Plan
<i>For Rent</i>	210	DU			Nishi Site Plan
City Park	15.9		15.9	CalEEMod	Nishi Site Plan
Detention Basin	4		4.0	Included in grading assumptions	Nishi Site Plan
Pool/Spa	1743	sqft		CalEEMod. Assumes 12.5% of an average Olympic Size Pool (82,500/660,000 gal). Average Olympic pool has a surface area of 13,940sqft.	Usage of Pool/Spa assumed by Davis Energy Group
Water and Energy Utilities				CalEEMod. No land uses inputs. Modeled assuming one month of trenching activity will occur for construction of water/utility infrastructure. See CalEEMod outputs for details.	
Parking Structure	845	spaces	0.0	CalEEMod. Capacity of parking structure. Footprint already included in non-res footprint	Nishi Site Plan
Surface Parking	328	spaces	3.0	CalEEMod Assumptions. Assumes 1/2 of surface parking will be constructed in phase 1. Building footprint is included in other buildings.	Nishi Site Plan
Bridge to West Olive			1.0	Road Construction Emissions Model	Nishi Site Plan
Roads	4217	feet	3.0	Road Construction Emissions Model	Nishi Site Plan
Total non-res to be painted	160,000	sqft			
Total res to be painted	361,000	sqft			
Total Parking lot area to be painted	469,200	sqft			
TOTAL			34.0		

Phase 2 - Starting in 2019	Amount	Units	Acreage	Calculation Method	Data Source
Office Park	82,500	sqft	1.3	CalEEMod	Nishi Site Plan
Research and Development	82,500	sqft	1.3	CalEEMod	Nishi Site Plan
Mid-Rise Apartments	331	DU	5.0	CalEEMod	Nishi Site Plan
<i>For Sale</i>	126	DU		CalEEMod	Nishi Site Plan
<i>For Rent</i>	204	DU		CalEEMod	Nishi Site Plan
Retail	20,000	sqft	0.0	park/R&D	Nishi Site Plan
<i>High Turnover Restaurant</i>	7,000	sqft		CalEEMod	Assumption
<i>Quality Restaurant</i>	2,000	sqft		CalEEMod	Assumption
<i>24hour Convenience Store</i>	1,000	sqft		CalEEMod	Assumption
<i>Health Club</i>	10,000	sqft		CalEEMod	Assumption
Surface Parking	538	spaces	3.0	CalEEMod Assumptions. Assumes 1/2 of surface parking will be constructed in phase 2. Building footprint is included in other buildings.	Nishi Site Plan
Podium Parking	210	spaces	0.0	CalEEMod Assumptions. Assumes 1/2 of podium parking will be constructed in phase 2. Building footprint is included in other buildings.	Nishi Site Plan
Underpass	0.02	miles		Road Construction Emissions Model. Replace crane operation with excavators	Nishi Site Plan
Total non-res to be painted	185,000	sqft			
Total res to be painted	376,000	sqft			
Total Parking lot area to be painted	299,200	sqft			
TOTAL			10.5		

Nishi Annual Operational GHG Emissions (Calculated Outside of CalEEMod)

Electricity							
Baseline (2022)							
Facility	MWh	Sqft	kWh/SF	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
Electricity Total	13,979			931	0.16	0.03	946
Unmitigated (2022)							
Facility	MWh	Sqft	kWh/SF	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
MF For Sale	1,450	325,200	4	97	0.02	0.00	98
MF Rental	3,092	604,200	5	206	0.04	0.01	209
R&D	4,171	325,000	13	278	0.05	0.01	282
Retail	107	20,000	5	7	0.00	0.00	7
Roadway Ltg	4			0	0.00	0.00	0
Walk/Bike Path Ltg	65			4	0.00	0.00	4
Open Parking Ltg	7			0	0.00	0.00	0
Garage Ltg	131			9	0.00	0.00	9
Garage Ventilation	195			13	0.00	0.00	13
Pool	15			1	0.00	0.00	1
Spa (x3)	28			2	0.00	0.00	2
Electricity Total	9,265	1,274,400	28	617	0	0	627
Solar Panel Electricity Generation (Bldg and carports)	8,077			538	0	0	547
Solar Panel Electricity Generation (Bldg and carports)	10,938			728	0	0	740
<i>Note: Assumes PG&E emission factors achieve 33% renewables by 2022.</i>							

Natural Gas							
Baseline (2022)							
Facility	Therms	Sqft	Therm/SF	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
Total	268,000			1,421	13.40	0.27	1,956
Natural Gas Total	268,000			1,421	13.40	0.27	1,956
Unmitigated (2022)							
Facility	Therms	Sqft	Therm/SF	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
MF For Sale	21,860	325,200	67	116	1.09	0.02	160
MF Rental	61,480	604,200	102	326	3.07	0.06	449
R&D	102,050	325,000	314	541	5.10	0.10	745
Retail	1,800	20,000	90	10	0.09	0.00	13
Roadway Ltg	-			0	0.00	0.00	0
Walk/Bike Path Ltg	-			0	0.00	0.00	0
Open Parking Ltg	-			0	0.00	0.00	0
Garage Ltg	-			0	0.00	0.00	0
Garage Ventilation	-			0	0.00	0.00	0
Pool	-			0	0.00	0.00	0
Spa (x3)	5,130			27	0.26	0.01	37
Other				0	0.00	0.00	0
Natural Gas Total	192,320			1,020	9.62	0.19	1,404

Water						
Baseline (2022)						
Water Management Type	Volume Transported (MG)	MWh	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
Potable						
R&D/Office	7.7					
R&D/Non-office	2.9					
Retail	0.5					
Retail (business use)	1.9					
Residential	36.5					
Non-Potable						
Open Space	4.9					
Summary						
Water Supply (potable)	49.5	195.66	15	0.00	0.00	15
Water Supply (recycled)	4.9494	3.96	0	0.00	0.00	0
Total	54	200	15	0.00	0.00	15
Unmitigated (2022)						
Water Management Type	Volume Transported (MG)	MWh	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
Potable	46.3					
Non-Potable						
Open Space	4.9					
Summary						
Water Supply (potable)	46.3	182.75	14	0.00	0.00	14
Water Supply (recycled)	4.9	3.96	0	0.00	0.00	0
Total	51	187	14	0.00	0.00	14
<i>Note: Assumes 5% reduction from baseline indoor water use that includes very high eff. fixtures.</i>						
Mitigated (2022)						
Water Management Type	Volume Transported (MG)	MWh	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
Potable	34.3					
Non-Potable						
Non-Potable (indoor)	3.3					
Non-Potable (open space)	4.9					
Summary						
Water Supply (potable)	34.3	135.40	10	0.00	0.00	10
Water Supply (recycled)	8.2	6.57	0	0.00	0.00	1
Total	42	142	11	0.00	0.00	11
<i>Note: Assumes 22% reduction from indoor water use that includes ultra high eff. Fixtures and non-potable water used for toilet flushing. Assumes electricity used to convey/treat water uses PG&E emission factors that are assumed to achieve 33% renewables by 2022.</i>						
<i>Source: Water Energy Cost Effectiveness Calculator (http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Water-Energy+Nexus+Programs.htm)</i>						

Transportation							
On-Road - Unmitigated (2022)							
Vehicle Type	Vehicle Miles Travelled	Fuel Type	Fuel Use (1000 gal or kwh)	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
Aggregate EMFAC2014 vehicle types	85%	Gas					
Aggregate EMFAC2014 vehicle types	13%	Diesel					
Aggregate EMFAC2014 vehicle types	2%	Electric					
Aggregate EMFAC2014 vehicle types	38,454	Gas	189,513	10,590	0.22		10,598
Aggregate EMFAC2014 vehicle types	5,772	Diesel	33,570	335	0.00		335
Aggregate EMFAC2014 vehicle types	974	Electric	346	0.026	0.00	0.00	0
Total VMT from Fehr & Peers	45,200			10,925	0.22		10,933
On-Road - Mitigated (2022)							
Vehicle Type	Vehicle Miles Travelled	Fuel Type	Fuel Use (1000 gal or kwh)	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
Aggregate EMFAC2014 vehicle types	85%	Gas					
Aggregate EMFAC2014 vehicle types	13%	Diesel					
Aggregate EMFAC2014 vehicle types	2%	Electric					
Aggregate EMFAC2014 vehicle types	30,763	Gas	151,611	8,472	0		8,478
Aggregate EMFAC2014 vehicle types	4,618	Diesel	26,856	268	0		268
Aggregate EMFAC2014 vehicle types	779	Electric	277	0.018	0.00	0.00	0
Total VMT from Fehr & Peers	36,160			8,740	0.17		8,746
On-Road - Unmitigated (2050)							
Vehicle Type	Vehicle Miles Travelled	Fuel Type	Fuel Use (1000 gal or kwh)	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
Aggregate EMFAC2014 vehicle types	78%	Gas					
Aggregate EMFAC2014 vehicle types	14%	Diesel					
Aggregate EMFAC2014 vehicle types	8%	Electric					
Aggregate EMFAC2014 vehicle types	35,252	Gas	339	8,498	0		8,500
Aggregate EMFAC2014 vehicle types	6,384	Diesel	122	659	0		659
Aggregate EMFAC2014 vehicle types	3,564	Electric	1,265	0.084	0.00	0.00	0.09
Total VMT from Fehr & Peers	45,200			9,157	0.07		9,159
On-Road - Mitigated (2050)							
Vehicle Type	Vehicle Miles Travelled	Fuel Type	Fuel Use (1000 gal or kwh)	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)
Aggregate EMFAC2014 vehicle types	78%	Gas					
Aggregate EMFAC2014 vehicle types	14%	Diesel					
Aggregate EMFAC2014 vehicle types	8%	Electric					
Aggregate EMFAC2014 vehicle types	28,202	Gas	271	6,799	0		6,800
Aggregate EMFAC2014 vehicle types	5,107	Diesel	98	527	0		527
Aggregate EMFAC2014 vehicle types	2,851	Electric	1,012	0.190	0.00	0.00	0
Total VMT from Fehr & Peers	36,160			7,326	0.05		7,328

Note: Electricity use per mile for electric vehicles was based on average kwh per mile from EPA Fuel Economy Data. Assumes mileage based on 50% light duty autos and 50% light duty utility vehicles for the 2013 model year.

Source: <http://www.fueleconomy.gov/feg/download.shtml>

Yolo County Vehicle Emission Factors from EMFAC 2014

			tpd/mi											1000 gal/day/mi
Calendar Year	fuel	%VMT	HC	CO	NOx	SOx	PM	TOG	ROG	CO2	CH4	PM10	PM2_5	Fuel
2022	Gas	85%	3.13E-07	2.48E-06	2.21E-07	8.34E-09	1.32E-07	3.34E-07	3.15E-07	0.000832	1.69E-08	1.29E-07	5.43E-08	1.35023E-05
2022	Dsl	13%	8.46E-09	5.16E-08	2.96E-07	1.67E-09	2.09E-08	1.21E-08	1.03E-08	0.000175	7.78E-10	2.06E-08	9.07E-09	1.59333E-05
2022	Elec	2%	2.42E-10	NA	NA	NA	8.34E-09	2.61E-10	2.61E-10	NA	NA	8.2E-09	3.25E-09	NA
2050	Gas	78%	1.68E-07	1.28E-06	8.49E-08	7.29E-09	1.61E-07	1.8E-07	1.73E-07	0.000728	5.64E-09	1.58E-07	6.4E-08	9.61613E-06
2050	Dsl	14%	1E-08	6.8E-08	4.28E-07	2.97E-09	3.7E-08	1.44E-08	1.26E-08	0.000312	6.21E-10	3.64E-08	1.54E-08	1.91624E-05
2050	Elec	8%	1.73E-09	NA	NA	NA	4.1E-08	1.86E-09	1.86E-09	NA	NA	4.03E-08	1.6E-08	NA

tpd/mi = tons per day per vehicle-mile

NA = Not Available

Source: EMFAC2014 v. 1.0.7

GHG Emission Assumptions

GWP			
CO2	1		
CH4	34	100 year lifespan. With inclusion of climate-carbon feedbacks as recommended by several studies (Gillett and Matthews 2010, Collins et al. 2013)	IPCC Fifth Assessment Report - Chapter 8. Table 8.7
N2O	298	100 year lifespan. With inclusion of climate-carbon feedbacks as recommended by several studies (Gillett and Matthews 2010, Collins et al. 2013)	IPCC Fifth Assessment Report - Chapter 8. Table 8.7
Energy Emission Factors	Value	Notes	Source
lb CH4/GWh	28.49	Electricity	eGrid 2010 (Updated February 2014)
lb N2O/GWh	6.03	Electricity	
MT CO2/MWh	0.075734386	Electricity - 2013 (23.8% renewable)	PG&E 2013 EPS Report, CPUC
MT CO2/MWh	0.066590602	Electricity - 2020 (33% renewable)	http://www.cpuc.ca.gov/PUC/energy/Renewables/
MT CH4/MWh	1.13626E-05	Electricity (33% renewable)	Calculated from PG&E 2013 Emission Factors
MT N2O/MWh	2.40493E-06	Electricity (33% renewable)	
kg CO ₂ /MMBtu	53.02	Natural Gas - US Weighted Average	Calculated from eGrid 2010 assuming eGrid factors are represented by 23.8% renewables
g CH4/MMBtu	5	Natural Gas - Residential/Commercial	2014 Climate Registry Emission Factors. Table 12.1.
g N2O/MMBtu	0.1	Natural Gas - Residential/Commercial	2014 Climate Registry Emission Factors. Table 12.9.

Construction of Roadways Phase 1

**Road Construction Emissions Model
Data Entry Worksheet**

Version 7.1.5.1



Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells C10 through C25.

Input Type

Project Name	Nishi - Phase 1 - Roads	
Construction Start Year	2017	Enter a Year between 2009 and 2025 (inclusive)
Project Type	1	1 New Road Construction 2 Road Widening 3 Bridge/Overpass Construction
Project Construction Time	5.00	months
Predominant Soil/Site Type: Enter 1, 2, or 3	1	1. Sand Gravel 2. Weathered Rock-Earth 3. Blasted Rock
Project Length	0.80	miles
Total Project Area	3.00	acres
Maximum Area Disturbed/Day	2.00	acres
Water Trucks Used?	1	1. Yes 2. No
Soil Imported	0.00	yd ³ /day
Soil Exported	0.00	yd ³ /day
Average Truck Capacity	20	yd ³ (assume 20 if unknown)

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells C34 through C37.

Construction Periods	User Override of	Program					
	Construction Months	Months	2005	%	2006	%	2007
Grubbing/Land Clearing		0.50	0.00	0.00	0.00	0.00	0.00
Grading/Excavation		2.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade		1.75	0.00	0.00	0.00	0.00	0.00
Paving		0.75	0.00	0.00	0.00	0.00	0.00
Totals	0.00	5.00					

NOTE: soil hauling emissions are included in the Grading/Excavation Construction Period Phase, therefore the Construction Period for Grading/Excavation cannot be zero if hauling is part of the project

Hauling emission default values can be overridden in cells C45 through C46.

Soil Hauling Emissions		User Override of					
User Input	Soil Hauling Defaults	Default Values					
Miles/round trip		30					
Round trips/day		0					
Vehicle miles traveled/day (calculated)				0			
Hauling Emissions	ROG	NOx	CO	PM10	PM2.5	CO2	
Emission rate (grams/mile)	0.15	7.43	0.65	0.16	0.09	1652.56	
Emission rate (grams/trip)	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per construction period	0.00	0.00	0.00	0.00	0.00	0.00	

Worker commute default values can be overridden in cells C60 through C65.

Worker Commute Emissions		User Override of Worker					
	Commute Default Values	Default Values					
Miles/ one-way trip		20					
One-way trips/day		2					
No. of employees: Grubbing/Land Clearing		5					
No. of employees: Grading/Excavation		18					
No. of employees: Drainage/Utilities/Sub-Grade		15					
No. of employees: Paving		11					
	ROG	NOx	CO	PM10	PM2.5	CO2	
Emission rate - Grubbing/Land Clearing (grams/mile)	0.133	0.172	1.555	0.047	0.020	443.765	
Emission rate - Grading/Excavation (grams/mile)	0.133	0.172	1.555	0.047	0.020	443.765	
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.133	0.172	1.555	0.047	0.020	443.765	
Emission rate - Paving (grams/mile)	0.133	0.172	1.555	0.047	0.020	443.765	
Emission rate - Grubbing/Land Clearing (grams/trip)	0.457	0.287	3.779	0.004	0.003	95.644	
Emission rate - Grading/Excavation (grams/trip)	0.457	0.287	3.779	0.004	0.003	95.644	
Emission rate - Draining/Utilities/Sub-Grade (gr/trip)	0.457	0.287	3.779	0.004	0.003	95.644	
Emission rate - Paving (grams/trip)	0.457	0.287	3.779	0.004	0.003	95.644	
Pounds per day - Grubbing/Land Clearing	0.068	0.082	0.768	0.021	0.009	197.598	
Tons per const. Period - Grub/Land Clear	0.000	0.000	0.004	0.000	0.000	1.087	
Pounds per day - Grading/Excavation	0.240	0.288	2.689	0.073	0.031	691.593	
Tons per const. Period - Grading/Excavation	0.005	0.006	0.059	0.002	0.001	15.215	
Pounds per day - Drainage/Utilities/Sub-Grade	0.205	0.247	2.305	0.062	0.026	592.794	
Tons per const. Period - Drain/Util/Sub-Grade	0.004	0.005	0.044	0.001	0.001	11.411	
Pounds per day - Paving	0.154	0.185	1.729	0.047	0.020	444.596	
Tons per const. Period - Paving	0.001	0.002	0.014	0.000	0.000	3.668	
tons per construction period	0.011	0.013	0.122	0.003	0.001	31.381	

Water truck default values can be overridden in cells C91 through C93 and E91 through E93.

Water Truck Emissions	User Override of	Program Estimate of	User Override of Truck	Default Values			
	Default # Water Trucks	Number of Water Trucks	Miles Traveled/Day	Miles Traveled/Day			
Grubbing/Land Clearing - Exhaust		1		40			
Grading/Excavation - Exhaust		1		40			
Drainage/Utilities/Subgrade		1		40			
	ROG	NOx	CO	PM10	PM2.5	CO2	
Emission rate - Grubbing/Land Clearing (grams/mile)	0.15	7.43	0.65	0.16	0.09	1652.56	
Emission rate - Grading/Excavation (grams/mile)	0.15	7.43	0.65	0.16	0.09	1652.56	
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.15	7.43	0.65	0.16	0.09	1652.56	
Pounds per day - Grubbing/Land Clearing	0.01	0.65	0.06	0.01	0.01	145.60	
Tons per const. Period - Grub/Land Clear	0.00	0.00	0.00	0.00	0.00	0.80	
Pound per day - Grading/Excavation	0.01	0.65	0.06	0.01	0.01	145.60	
Tons per const. Period - Grading/Excavation	0.00	0.01	0.00	0.00	0.00	3.20	
Pound per day - Drainage/Utilities/Subgrade	0.01	0.65	0.06	0.01	0.01	145.60	
Tons per const. Period - Drainage/Utilities/Subgrade	0.00	0.01	0.00	0.00	0.00	2.80	

Fugitive dust default values can be overridden in cells C110 through C112.

Fugitive Dust	User Override of Max	Default	PM10	PM10	PM2.5	PM2.5
	Acreage Disturbed/Day	Maximum Acreage/Day	pounds/day	tons/per period	pounds/day	tons/per period
Fugitive Dust - Grubbing/Land Clearing		2	20.0	0.1	4.2	0.0
Fugitive Dust - Grading/Excavation		2	20.0	0.4	4.2	0.1
Fugitive Dust - Drainage/Utilities/Subgrade		2	20.0	0.4	4.2	0.1

Off-Road Equipment Emissions

Grubbing/Land Clearing	Default Number of Vehicles	Type	ROG	CO	NOx	PM10	PM2.5
Override of Default Number of Vehicles	Program-estimate		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00
	1	Crawler Tractors	0.71	4.47	9.06	0.35	0.32
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
	1	Excavators	0.38	2.79	4.05	0.20	0.18
		Forklifts	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00	0.00
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00
		Scrapers	0.00	0.00	0.00	0.00	0.00
	2	Signal Boards	0.64	2.65	2.54	0.17	0.16
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Grubbing/Land Clearing	pounds per day	1.7	9.9	15.7	0.7	0.7
	Grubbing/Land Clearing	tons per phase	0.0	0.1	0.1	0.0	0.0

Grading/Excavation	Default		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day
	Number of Vehicles	Type					
Override of Default Number of Vehicles	Program-estimate						
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
	0	Cranes	0.00	0.00	0.00	0.00	0.00
	1	Crawler Tractors	0.71	4.47	9.06	0.35	0.32
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
	3	Excavators	1.15	8.37	12.15	0.60	0.55
		Forklifts	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00
	1	Graders	1.00	3.47	9.64	0.54	0.50
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00
	2	Rollers	0.65	3.02	5.76	0.42	0.38
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
	1	Rubber Tired Loaders	0.50	3.12	6.05	0.21	0.19
	2	Scrapers	2.73	14.51	32.82	1.32	1.21
	2	Signal Boards	0.64	2.65	2.54	0.17	0.16
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
	2	Tractors/Loaders/Backhoes	0.67	3.14	6.11	0.46	0.42
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Grading/Excavation	pounds per day	8.0	42.7	84.2	4.1	3.7
	Grading	tons per phase	0.2	0.9	1.9	0.1	0.1

Drainage/Utilities/Subgrade Override of Default Number of Vehicles	Default		ROG	CO	NOx	PM10	PM2.5
	Number of Vehicles <i>Program-estimate</i>		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
	1	Air Compressors	0.63	3.41	4.13	0.33	0.31
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00
	1	Generator Sets	0.47	2.97	3.65	0.25	0.23
	1	Graders	1.00	3.47	9.64	0.54	0.50
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00
	1	Plate Compactors	0.04	0.21	0.25	0.01	0.01
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
	1	Pumps	0.40	2.45	3.01	0.21	0.20
		Rollers	0.00	0.00	0.00	0.00	0.00
	1	Rough Terrain Forklifts	0.20	2.03	2.43	0.13	0.12
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00
	2	Scrapers	2.73	14.51	32.82	1.32	1.21
	2	Signal Boards	0.64	2.65	2.54	0.17	0.16
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
	2	Tractors/Loaders/Backhoes	0.67	3.14	6.11	0.46	0.42
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Drainage	pounds per day	6.8	34.8	64.6	3.4	3.2
	Drainage	tons per phase	0.1	0.7	1.2	0.1	0.1

Paving	Default		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day
	Override of Default Number of Vehicles	Number of Vehicles <i>Program-estimate</i>					
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
	1	Pavers	0.37	2.84	4.01	0.20	0.18
	1	Paving Equipment	0.29	2.69	3.18	0.16	0.15
		Plate Compactors	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00
	3	Rollers	0.97	4.53	8.64	0.63	0.58
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00
		Scrapers	0.00	0.00	0.00	0.00	0.00
	2	Signal Boards	0.64	2.65	2.54	0.17	0.16
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
	2	Tractors/Loaders/Backhoes	0.67	3.14	6.11	0.46	0.42
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Paving	pounds per day	2.9	15.9	24.5	1.6	1.5
	Paving	tons per phase	0.0	0.1	0.2	0.0	0.0
Total Emissions all Phases (tons per construction period) =>			0.3	1.8	3.4	0.2	0.2

Equipment default values for horsepower and hours/day can be overridden in cells C289 through C322 and E289 through E322.

Equipment	Default Values Horsepower	Default Values Hours/day
Aerial Lifts	63	8
Air Compressors	106	8
Bore/Drill Rigs	206	8
Cement and Mortar Mixers	10	8
Concrete/Industrial Saws	64	8
Cranes	226	8
Crawler Tractors	208	8
Crushing/Proc. Equipment	142	8
Excavators	163	8
Forklifts	89	8
Generator Sets	66	8
Graders	175	8
Off-Highway Tractors	123	8
Off-Highway Trucks	400	8
Other Construction Equipment	172	8
Other General Industrial Equipment	88	8
Other Material Handling Equipment	167	8
Pavers	126	8
Paving Equipment	131	8
Plate Compactors	8	8
Pressure Washers	26	8
Pumps	53	8
Rollers	81	8
Rough Terrain Forklifts	100	8
Rubber Tired Dozers	255	8
Rubber Tired Loaders	200	8
Scrapers	362	8
Signal Boards	20	8
Skid Steer Loaders	65	8
Surfacing Equipment	254	8
Sweepers/Scrubbers	64	8
Tractors/Loaders/Backhoes	98	8
Trenchers	81	8
Welders	45	8

Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -> Nishi - Phase 1 - Roads				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	
Grubbing/Land Clearing	1.8	10.7	16.4	20.7	0.7	20.0	4.8	0.7	4.2	2,056.3
Grading/Excavation	8.3	45.5	85.1	24.1	4.1	20.0	7.9	3.8	4.2	9,473.7
Drainage/Utilities/Sub-Grade	7.0	37.2	65.5	23.5	3.5	20.0	7.3	3.2	4.2	7,407.8
Paving	3.1	17.6	24.7	1.7	1.7	-	1.5	1.5	-	3,177.3
Maximum (pounds/day)	8.3	45.5	85.1	24.1	4.1	20.0	7.9	3.8	4.2	9,473.7
Total (tons/construction project)	0.4	1.9	3.4	1.1	0.2	0.9	0.4	0.2	0.2	388.5

Notes: Project Start Year -> 2017
 Project Length (months) -> 5
 Total Project Area (acres) -> 3
 Maximum Area Disturbed/Day (acres) -> 2
 Total Soil Imported/Exported (yd³/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Nishi - Phase 1 - Roads				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	
Grubbing/Land Clearing	0.8	4.9	7.5	9.4	0.3	9.1	2.2	0.3	1.9	934.7
Grading/Excavation	3.8	20.7	38.7	11.0	1.9	9.1	3.6	1.7	1.9	4,306.2
Drainage/Utilities/Sub-Grade	3.2	16.9	29.8	10.7	1.6	9.1	3.3	1.4	1.9	3,367.2
Paving	1.4	8.0	11.2	0.8	0.8	-	0.7	0.7	-	1,444.2
Maximum (kilograms/day)	3.8	20.7	38.7	11.0	1.9	9.1	3.6	1.7	1.9	4,306.2
Total (megagrams/construction project)	0.3	1.7	3.1	1.0	0.2	0.8	0.3	0.1	0.2	352.4

Notes: Project Start Year -> 2017
 Project Length (months) -> 5
 Total Project Area (hectares) -> 1
 Maximum Area Disturbed/Day (hectares) -> 1
 Total Soil Imported/Exported (meters³/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Construction of West Olive Bridge Phase 1

**Road Construction Emissions Model
Data Entry Worksheet**

Version 7.1.5.1



Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells C10 through C25.

Input Type

Project Name	Nishi - Phase 1 - Bridge to West Olive	
Construction Start Year	2017	Enter a Year between 2009 and 2025 (inclusive)
Project Type	3	1 New Road Construction 2 Road Widening 3 Bridge/Overpass Construction
Project Construction Time	2.00	months
Predominant Soil/Site Type: Enter 1, 2, or 3	1	1. Sand Gravel 2. Weathered Rock-Earth 3. Blasted Rock
Project Length	0.02	miles
Total Project Area	1.00	acre
Maximum Area Disturbed/Day	1.00	acres
Water Trucks Used?	1	1. Yes 2. No
Soil Imported	20.00	yd ³ /day
Soil Exported	20.00	yd ³ /day
Average Truck Capacity	20	yd ³ (assume 20 if unknown)

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells C34 through C37.

Construction Periods	User Override of	Program					
	Construction Months	Calculated	2005	%	2006	%	2007
Grubbing/Land Clearing		0.20	0.00		0.00		0.00
Grading/Excavation		0.80	0.00		0.00		0.00
Drainage/Utilities/Sub-Grade		0.70	0.00		0.00		0.00
Paving		0.30	0.00		0.00		0.00
Totals	0.00	2.00					

NOTE: soil hauling emissions are included in the Grading/Excavation Construction Period Phase, therefore the Construction Period for Grading/Excavation cannot be zero if hauling is part of the project

Hauling emission default values can be overridden in cells C45 through C46.

Soil Hauling Emissions		User Override of					
User Input	Soil Hauling Defaults	Default Values					
Miles/round trip		30					
Round trips/day		2					
Vehicle miles traveled/day (calculated)				60			
Hauling Emissions	ROG	NOx	CO	PM10	PM2.5	CO2	
Emission rate (grams/mile)	0.15	7.43	0.65	0.16	0.09	1652.56	
Emission rate (grams/trip)	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day	0.02	0.98	0.09	0.02	0.01	218.40	
Tons per construction period	0.00	0.01	0.00	0.00	0.00	1.92	

Worker commute default values can be overridden in cells C60 through C65.

Worker Commute Emissions		User Override of Worker					
	Commute Default Values	Default Values					
Miles/ one-way trip		20					
One-way trips/day		2					
No. of employees: Grubbing/Land Clearing		5					
No. of employees: Grading/Excavation		28					
No. of employees: Drainage/Utilities/Sub-Grade		18					
No. of employees: Paving		8					
	ROG	NOx	CO	PM10	PM2.5	CO2	
Emission rate - Grubbing/Land Clearing (grams/mile)	0.133	0.172	1.555	0.047	0.020	443.765	
Emission rate - Grading/Excavation (grams/mile)	0.133	0.172	1.555	0.047	0.020	443.765	
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.133	0.172	1.555	0.047	0.020	443.765	
Emission rate - Paving (grams/mile)	0.133	0.172	1.555	0.047	0.020	443.765	
Emission rate - Grubbing/Land Clearing (grams/trip)	0.457	0.287	3.779	0.004	0.003	95.644	
Emission rate - Grading/Excavation (grams/trip)	0.457	0.287	3.779	0.004	0.003	95.644	
Emission rate - Draining/Utilities/Sub-Grade (gr/trip)	0.457	0.287	3.779	0.004	0.003	95.644	
Emission rate - Paving (grams/trip)	0.457	0.287	3.779	0.004	0.003	95.644	
Pounds per day - Grubbing/Land Clearing	0.068	0.082	0.768	0.021	0.009	197.598	
Tons per const. Period - Grub/Land Clear	0.000	0.000	0.002	0.000	0.000	0.435	
Pounds per day - Grading/Excavation	0.377	0.452	4.226	0.114	0.048	1086.789	
Tons per const. Period - Grading/Excavation	0.003	0.004	0.037	0.001	0.000	9.564	
Pounds per day - Drainage/Utilities/Sub-Grade	0.240	0.288	2.689	0.073	0.031	691.593	
Tons per const. Period - Drain/Util/Sub-Grade	0.002	0.002	0.021	0.001	0.000	5.325	
Pounds per day - Paving	0.103	0.123	1.152	0.031	0.013	296.397	
Tons per const. Period - Paving	0.000	0.000	0.004	0.000	0.000	0.978	
tons per construction period	0.006	0.007	0.063	0.002	0.001	16.302	

Water truck default values can be overridden in cells C91 through C93 and E91 through E93.

Water Truck Emissions	User Override of	Program Estimate of	User Override of Truck	Default Values			
	Default # Water Trucks	Number of Water Trucks	Miles Traveled/Day	Miles Traveled/Day			
Grubbing/Land Clearing - Exhaust		1		40			
Grading/Excavation - Exhaust		1		40			
Drainage/Utilities/Subgrade		1		40			
	ROG	NOx	CO	PM10	PM2.5	CO2	
Emission rate - Grubbing/Land Clearing (grams/mile)	0.15	7.43	0.65	0.16	0.09	1652.56	
Emission rate - Grading/Excavation (grams/mile)	0.15	7.43	0.65	0.16	0.09	1652.56	
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.15	7.43	0.65	0.16	0.09	1652.56	
Pounds per day - Grubbing/Land Clearing	0.01	0.65	0.06	0.01	0.01	145.60	
Tons per const. Period - Grub/Land Clear	0.00	0.00	0.00	0.00	0.00	0.32	
Pound per day - Grading/Excavation	0.01	0.65	0.06	0.01	0.01	145.60	
Tons per const. Period - Grading/Excavation	0.00	0.01	0.00	0.00	0.00	1.28	
Pound per day - Drainage/Utilities/Subgrade	0.01	0.65	0.06	0.01	0.01	145.60	
Tons per const. Period - Drainage/Utilities/Subgrade	0.00	0.01	0.00	0.00	0.00	1.12	

Fugitive dust default values can be overridden in cells C110 through C112.

Fugitive Dust	User Override of Max	Default	PM10	PM10	PM2.5	PM2.5
	Acreage Disturbed/Day	Maximum Acreage/Day	pounds/day	tons/per period	pounds/day	tons/per period
Fugitive Dust - Grubbing/Land Clearing		1	10.0	0.0	2.1	0.0
Fugitive Dust - Grading/Excavation		1	10.0	0.1	2.1	0.0
Fugitive Dust - Drainage/Utilities/Subgrade		1	10.0	0.1	2.1	0.0

Off-Road Equipment Emissions

Grubbing/Land Clearing	Default Number of Vehicles		ROG	CO	NOx	PM10	PM2.5
Override of Default Number of Vehicles	Program-estimate	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00
	1	Crawler Tractors	0.71	4.47	9.06	0.35	0.32
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
	2	Excavators	0.76	5.58	8.10	0.40	0.37
		Forklifts	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00	0.00
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00
		Scrapers	0.00	0.00	0.00	0.00	0.00
	1	Signal Boards	0.32	1.33	1.27	0.08	0.08
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Grubbing/Land Clearing	pounds per day	1.8	11.4	18.4	0.8	0.8
	Grubbing/Land Clearing	tons per phase	0.0	0.0	0.0	0.0	0.0

Grading/Excavation	Default		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day
	Number of Vehicles	Type					
Override of Default Number of Vehicles	Program-estimate						
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
	1	Cranes	0.67	3.01	7.64	0.34	0.31
	2	Crawler Tractors	1.41	8.95	18.13	0.69	0.64
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
	4	Excavators	1.53	11.15	16.20	0.80	0.73
		Forklifts	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00
	2	Graders	1.99	6.95	19.28	1.08	1.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00
	3	Rollers	0.97	4.53	8.64	0.63	0.58
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
	3	Rubber Tired Loaders	1.49	9.35	18.16	0.62	0.57
	4	Scrapers	5.47	29.02	65.65	2.63	2.42
	1	Signal Boards	0.32	1.33	1.27	0.08	0.08
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
	2	Tractors/Loaders/Backhoes	0.67	3.14	6.11	0.46	0.42
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Grading/Excavation	pounds per day	14.5	77.4	161.1	7.3	6.7
	Grading	tons per phase	0.1	0.7	1.4	0.1	0.1

Drainage/Utilities/Subgrade Override of Default Number of Vehicles	Default		ROG	CO	NOx	PM10	PM2.5
	Number of Vehicles <i>Program-estimate</i>		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
	1	Air Compressors	0.63	3.41	4.13	0.33	0.31
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00
	1	Generator Sets	0.47	2.97	3.65	0.25	0.23
	2	Graders	1.99	6.95	19.28	1.08	1.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00
	1	Plate Compactors	0.04	0.21	0.25	0.01	0.01
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
	1	Pumps	0.40	2.45	3.01	0.21	0.20
		Rollers	0.00	0.00	0.00	0.00	0.00
	1	Rough Terrain Forklifts	0.20	2.03	2.43	0.13	0.12
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00
	4	Scrapers	5.47	29.02	65.65	2.63	2.42
	1	Signal Boards	0.32	1.33	1.27	0.08	0.08
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
	2	Tractors/Loaders/Backhoes	0.67	3.14	6.11	0.46	0.42
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Drainage	pounds per day	10.2	51.5	105.8	5.2	4.8
	Drainage	tons per phase	0.1	0.4	0.8	0.0	0.0

Paving	Default		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day
	Override of Default Number of Vehicles	Number of Vehicles <i>Program-estimate</i>					
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
	1	Pavers	0.37	2.84	4.01	0.20	0.18
	1	Paving Equipment	0.29	2.69	3.18	0.16	0.15
		Plate Compactors	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00
	1	Rollers	0.32	1.51	2.88	0.21	0.19
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00
		Scrapers	0.00	0.00	0.00	0.00	0.00
	1	Signal Boards	0.32	1.33	1.27	0.08	0.08
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
	2	Tractors/Loaders/Backhoes	0.67	3.14	6.11	0.46	0.42
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Paving	pounds per day	2.0	11.5	17.5	1.1	1.0
	Paving	tons per phase	0.0	0.0	0.1	0.0	0.0
Total Emissions all Phases (tons per construction period) =>			0.2	1.1	2.3	0.1	0.1

Equipment default values for horsepower and hours/day can be overridden in cells C289 through C322 and E289 through E322.

Equipment		Default Values Horsepower		Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		106		8
Bore/Drill Rigs		206		8
Cement and Mortar Mixers		10		8
Concrete/Industrial Saws		64		8
Cranes		226		8
Crawler Tractors		208		8
Crushing/Proc. Equipment		142		8
Excavators		163		8
Forklifts		89		8
Generator Sets		66		8
Graders		175		8
Off-Highway Tractors		123		8
Off-Highway Trucks		400		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		167		8
Pavers		126		8
Paving Equipment		131		8
Plate Compactors		8		8
Pressure Washers		26		8
Pumps		53		8
Rollers		81		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		255		8
Rubber Tired Loaders		200		8
Scrapers		362		8
Signal Boards		20		8
Skid Steer Loaders		65		8
Surfacing Equipment		254		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		98		8
Trenchers		81		8
Welders		45		8

0

END OF DATA ENTRY SHEET

Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -> Nishi - Phase 1 - Bridge to West Olive				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	1.9	12.2	19.2	10.9	0.9	10.0	2.9	0.8	2.1	2,471.6
Grading/Excavation	14.9	81.8	163.2	17.5	7.5	10.0	8.9	6.8	2.1	17,420.1
Drainage/Utilities/Sub-Grade	10.4	54.3	106.7	15.3	5.3	10.0	6.9	4.8	2.1	11,234.3
Paving	2.1	12.7	17.6	1.1	1.1	-	1.0	1.0	-	2,312.7
Maximum (pounds/day)	14.9	81.8	163.2	17.5	7.5	10.0	8.9	6.8	2.1	17,420.1
Total (tons/construction project)	0.2	1.2	2.4	0.3	0.1	0.2	0.1	0.1	0.0	252.9

Notes: Project Start Year -> 2017
 Project Length (months) -> 2
 Total Project Area (acres) -> 1
 Maximum Area Disturbed/Day (acres) -> 1
 Total Soil Imported/Exported (yd³/day)-> 40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Nishi - Phase 1 - Bridge to West Olive				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	CO2 (kgs/day)
Grubbing/Land Clearing	0.9	5.5	8.7	4.9	0.4	4.5	1.3	0.4	0.9	1,123.5
Grading/Excavation	6.8	37.2	74.2	7.9	3.4	4.5	4.0	3.1	0.9	7,918.2
Drainage/Utilities/Sub-Grade	4.7	24.7	48.5	6.9	2.4	4.5	3.1	2.2	0.9	5,106.5
Paving	0.9	5.8	8.0	0.5	0.5	-	0.5	0.5	-	1,051.2
Maximum (kilograms/day)	6.8	37.2	74.2	7.9	3.4	4.5	4.0	3.1	0.9	7,918.2
Total (megagrams/construction project)	0.2	1.1	2.1	0.3	0.1	0.2	0.1	0.1	0.0	229.4

Notes: Project Start Year -> 2017
 Project Length (months) -> 2
 Total Project Area (hectares) -> 0
 Maximum Area Disturbed/Day (hectares) -> 0
 Total Soil Imported/Exported (meters³/day)-> 31

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Construction of Old Davis Road Underpass Phase 2

**Road Construction Emissions Model
Data Entry Worksheet**

Version 7.1.5.1



Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells C10 through C25.

Input Type

Project Name	Nishi - Phase 2 - Underpass	
Construction Start Year	2019	Enter a Year between 2009 and 2025 (inclusive)
Project Type	3	1 New Road Construction 2 Road Widening 3 Bridge/Overpass Construction
Project Construction Time	3.00	months
Predominant Soil/Site Type: Enter 1, 2, or 3	1	1. Sand Gravel 2. Weathered Rock-Earth 3. Blasted Rock
Project Length	0.02	miles
Total Project Area	1.00	acre
Maximum Area Disturbed/Day	1.00	acres
Water Trucks Used?	1	1. Yes 2. No
Soil Imported	0.00	yd ³ /day
Soil Exported	20.00	yd ³ /day
Average Truck Capacity	20	yd ³ (assume 20 if unknown)

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells C34 through C37.

Construction Periods	User Override of	Program					
	Construction Months	Calculated	2005	%	2006	%	2007
Grubbing/Land Clearing		0.30	0.00		0.00		0.00
Grading/Excavation		1.20	0.00		0.00		0.00
Drainage/Utilities/Sub-Grade		1.05	0.00		0.00		0.00
Paving		0.45	0.00		0.00		0.00
Totals	0.00	3.00					

NOTE: soil hauling emissions are included in the Grading/Excavation Construction Period Phase, therefore the Construction Period for Grading/Excavation cannot be zero if hauling is part of the project

Hauling emission default values can be overridden in cells C45 through C46.

Soil Hauling Emissions		User Override of					
User Input	Soil Hauling Defaults	Default Values					
Miles/round trip		30					
Round trips/day		1					
Vehicle miles traveled/day (calculated)				30			
Hauling Emissions	ROG	NOx	CO	PM10	PM2.5	CO2	
Emission rate (grams/mile)	0.15	5.88	0.69	0.16	0.09	1596.49	
Emission rate (grams/trip)	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day	0.01	0.39	0.05	0.01	0.01	105.50	
Tons per construction period	0.00	0.01	0.00	0.00	0.00	1.39	

Worker commute default values can be overridden in cells C60 through C65.

Worker Commute Emissions		User Override of Worker					
	Commute Default Values	Default Values					
Miles/ one-way trip		20					
One-way trips/day		2					
No. of employees: Grubbing/Land Clearing		5					
No. of employees: Grading/Excavation		28					
No. of employees: Drainage/Utilities/Sub-Grade		18					
No. of employees: Paving		8					
	ROG	NOx	CO	PM10	PM2.5	CO2	
Emission rate - Grubbing/Land Clearing (grams/mile)	0.112	0.140	1.291	0.047	0.020	441.739	
Emission rate - Grading/Excavation (grams/mile)	0.112	0.140	1.291	0.047	0.020	441.739	
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.112	0.140	1.291	0.047	0.020	441.739	
Emission rate - Paving (grams/mile)	0.112	0.140	1.291	0.047	0.020	441.739	
Emission rate - Grubbing/Land Clearing (grams/trip)	0.382	0.228	3.101	0.004	0.003	95.822	
Emission rate - Grading/Excavation (grams/trip)	0.382	0.228	3.101	0.004	0.003	95.822	
Emission rate - Draining/Utilities/Sub-Grade (gr/trip)	0.382	0.228	3.101	0.004	0.003	95.822	
Emission rate - Paving (grams/trip)	0.382	0.228	3.101	0.004	0.003	95.822	
Pounds per day - Grubbing/Land Clearing	0.058	0.067	0.637	0.021	0.009	196.709	
Tons per const. Period - Grub/Land Clear	0.000	0.000	0.002	0.000	0.000	0.649	
Pounds per day - Grading/Excavation	0.317	0.367	3.504	0.114	0.048	1081.902	
Tons per const. Period - Grading/Excavation	0.004	0.005	0.046	0.002	0.001	14.281	
Pounds per day - Drainage/Utilities/Sub-Grade	0.202	0.234	2.230	0.072	0.031	688.483	
Tons per const. Period - Drain/Util/Sub-Grade	0.002	0.003	0.026	0.001	0.000	7.952	
Pounds per day - Paving	0.087	0.100	0.956	0.031	0.013	295.064	
Tons per const. Period - Paving	0.000	0.000	0.005	0.000	0.000	1.461	
tons per construction period	0.007	0.008	0.079	0.003	0.001	24.343	

Water truck default values can be overridden in cells C91 through C93 and E91 through E93.

Water Truck Emissions	User Override of	Program Estimate of	User Override of Truck	Default Values			
	Default # Water Trucks	Number of Water Trucks	Miles Traveled/Day	Miles Traveled/Day			
Grubbing/Land Clearing - Exhaust		1		40			
Grading/Excavation - Exhaust		1		40			
Drainage/Utilities/Subgrade		1		40			
	ROG	NOx	CO	PM10	PM2.5	CO2	
Emission rate - Grubbing/Land Clearing (grams/mile)	0.15	5.88	0.69	0.16	0.09	1596.49	
Emission rate - Grading/Excavation (grams/mile)	0.15	5.88	0.69	0.16	0.09	1596.49	
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.15	5.88	0.69	0.16	0.09	1596.49	
Pounds per day - Grubbing/Land Clearing	0.01	0.52	0.06	0.01	0.01	140.66	
Tons per const. Period - Grub/Land Clear	0.00	0.00	0.00	0.00	0.00	0.46	
Pound per day - Grading/Excavation	0.01	0.52	0.06	0.01	0.01	140.66	
Tons per const. Period - Grading/Excavation	0.00	0.01	0.00	0.00	0.00	1.86	
Pound per day - Drainage/Utilities/Subgrade	0.01	0.52	0.06	0.01	0.01	140.66	
Tons per const. Period - Drainage/Utilities/Subgrade	0.00	0.01	0.00	0.00	0.00	1.62	

Fugitive dust default values can be overridden in cells C110 through C112.

Fugitive Dust	User Override of Max	Default	PM10	PM10	PM2.5	PM2.5
	Acreage Disturbed/Day	Maximum Acreage/Day	pounds/day	tons/per period	pounds/day	tons/per period
Fugitive Dust - Grubbing/Land Clearing		1	10.0	0.0	2.1	0.0
Fugitive Dust - Grading/Excavation		1	10.0	0.1	2.1	0.0
Fugitive Dust - Drainage/Utilities/Subgrade		1	10.0	0.1	2.1	0.0

Off-Road Equipment Emissions

Grubbing/Land Clearing		Default	ROG	CO	NOx	PM10	PM2.5
Override of Default Number of Vehicles	Number of Vehicles <i>Program-estimate</i>	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00
	1	Crawler Tractors	0.63	4.47	7.82	0.30	0.27
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
	2	Excavators	0.56	5.58	5.54	0.27	0.25
		Forklifts	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00	0.00
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00
		Scrapers	0.00	0.00	0.00	0.00	0.00
	1	Signal Boards	0.25	1.26	1.18	0.07	0.06
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Grubbing/Land Clearing	pounds per day	1.4	11.3	14.6	0.6	0.6
	Grubbing/Land Clearing	tons per phase	0.0	0.0	0.0	0.0	0.0

Grading/Excavation	Default		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day
	Number of Vehicles	Type					
Override of Default Number of Vehicles	Program-estimate						
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
0.00	1	Cranes	0.00	0.00	0.00	0.00	0.00
	2	Crawler Tractors	1.25	8.93	15.65	0.59	0.54
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
	4	Excavators	1.13	11.15	11.09	0.53	0.49
		Forklifts	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00
	2	Graders	1.60	6.92	15.13	0.85	0.78
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00
	3	Rollers	0.71	4.53	6.67	0.44	0.40
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
	3	Rubber Tired Loaders	1.24	9.34	14.30	0.48	0.44
	4	Scrapers	4.41	29.02	51.10	2.00	1.84
	1	Signal Boards	0.25	1.26	1.18	0.07	0.06
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
	2	Tractors/Loaders/Backhoes	0.49	3.14	4.70	0.31	0.29
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Grading/Excavation	pounds per day	11.1	74.3	119.8	5.3	4.8
	Grading	tons per phase	0.1	1.0	1.6	0.1	0.1

Drainage/Utilities/Subgrade Override of Default Number of Vehicles	Default		ROG	CO	NOx	PM10	PM2.5
	Number of Vehicles <i>Program-estimate</i>		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
	1	Air Compressors	0.53	3.38	3.59	0.26	0.24
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00
	1	Generator Sets	0.38	2.94	3.20	0.20	0.18
	2	Graders	1.60	6.92	15.13	0.85	0.78
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00
	1	Plate Compactors	0.04	0.21	0.25	0.01	0.01
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
	1	Pumps	0.33	2.43	2.64	0.17	0.16
		Rollers	0.00	0.00	0.00	0.00	0.00
	1	Rough Terrain Forklifts	0.15	2.03	1.87	0.08	0.08
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00
	4	Scrapers	4.41	29.02	51.10	2.00	1.84
	1	Signal Boards	0.25	1.26	1.18	0.07	0.06
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
	2	Tractors/Loaders/Backhoes	0.49	3.14	4.70	0.31	0.29
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Drainage	pounds per day	8.2	51.3	83.7	4.0	3.6
	Drainage	tons per phase	0.1	0.6	1.0	0.0	0.0

Paving	Default		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day
	Override of Default Number of Vehicles	Number of Vehicles <i>Program-estimate</i>					
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00
	1	Pavers	0.29	2.84	2.99	0.15	0.13
	1	Paving Equipment	0.22	2.69	2.20	0.11	0.10
		Plate Compactors	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00
	1	Rollers	0.24	1.51	2.22	0.15	0.13
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00
		Scrapers	0.00	0.00	0.00	0.00	0.00
	1	Signal Boards	0.25	1.26	1.18	0.07	0.06
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00
	2	Tractors/Loaders/Backhoes	0.49	3.14	4.70	0.31	0.29
		Trenchers	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00
	Paving	pounds per day	1.5	11.4	13.3	0.8	0.7
	Paving	tons per phase	0.0	0.1	0.1	0.0	0.0
Total Emissions all Phases (tons per construction period) =>			0.3	1.7	2.7	0.1	0.1

Equipment default values for horsepower and hours/day can be overridden in cells C289 through C322 and E289 through E322.

Equipment	Default Values Horsepower	Default Values Hours/day
Aerial Lifts	63	8
Air Compressors	106	8
Bore/Drill Rigs	206	8
Cement and Mortar Mixers	10	8
Concrete/Industrial Saws	64	8
Cranes	226	8
Crawler Tractors	208	8
Crushing/Proc. Equipment	142	8
Excavators	163	8
Forklifts	89	8
Generator Sets	66	8
Graders	175	8
Off-Highway Tractors	123	8
Off-Highway Trucks	400	8
Other Construction Equipment	172	8
Other General Industrial Equipment	88	8
Other Material Handling Equipment	167	8
Pavers	126	8
Paving Equipment	131	8
Plate Compactors	8	8
Pressure Washers	26	8
Pumps	53	8
Rollers	81	8
Rough Terrain Forklifts	100	8
Rubber Tired Dozers	255	8
Rubber Tired Loaders	200	8
Scrapers	362	8
Signal Boards	20	8
Skid Steer Loaders	65	8
Surfacing Equipment	254	8
Sweepers/Scrubbers	64	8
Tractors/Loaders/Backhoes	98	8
Trenchers	81	8
Welders	45	8

Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -> Nishi - Phase 2 - Underpass				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	1.5	12.0	15.1	10.7	0.7	10.0	2.7	0.6	2.1	2,464.5
Grading/Excavation	11.4	77.9	121.1	15.4	5.4	10.0	7.0	4.9	2.1	16,686.3
Drainage/Utilities/Sub-Grade	8.4	53.6	84.4	14.0	4.0	10.0	5.8	3.7	2.1	11,220.2
Paving	1.6	12.4	13.4	0.8	0.8	-	0.7	0.7	-	2,309.9
Maximum (pounds/day)	11.4	77.9	121.1	15.4	5.4	10.0	7.0	4.9	2.1	16,686.3
Total (tons/construction project)	0.3	1.7	2.7	0.4	0.1	0.3	0.2	0.1	0.1	369.4

Notes: Project Start Year -> 2019
 Project Length (months) -> 3
 Total Project Area (acres) -> 1
 Maximum Area Disturbed/Day (acres) -> 1
 Total Soil Imported/Exported (yd³/day)-> 20

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Nishi - Phase 2 - Underpass				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	CO2 (kgs/day)
Grubbing/Land Clearing	0.7	5.5	6.9	4.8	0.3	4.5	1.2	0.3	0.9	1,120.2
Grading/Excavation	5.2	35.4	55.0	7.0	2.5	4.5	3.2	2.2	0.9	7,584.7
Drainage/Utilities/Sub-Grade	3.8	24.4	38.4	6.4	1.8	4.5	2.6	1.7	0.9	5,100.1
Paving	0.7	5.6	6.1	0.4	0.4	-	0.3	0.3	-	1,050.0
Maximum (kilograms/day)	5.2	35.4	55.0	7.0	2.5	4.5	3.2	2.2	0.9	7,584.7
Total (megagrams/construction project)	0.2	1.6	2.4	0.4	0.1	0.3	0.2	0.1	0.1	335.1

Notes: Project Start Year -> 2019
 Project Length (months) -> 3
 Total Project Area (hectares) -> 0
 Maximum Area Disturbed/Day (hectares) -> 0
 Total Soil Imported/Exported (meters³/day)-> 15

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

CaEEMod Outputs

Nishi Development Project - Phase 1 (Unmitigated)

Yolo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	80.00	1000sqft	1.20	80,000.00	0
Research & Development	80.00	1000sqft	1.20	80,000.00	0
Enclosed Parking Structure	210.00	Space	0.00	84,000.00	0
Parking Lot	328.00	Space	3.00	131,200.00	0
Unenclosed Parking with Elevator	845.00	Space	0.00	338,000.00	0
City Park	19.90	Acre	19.90	866,844.00	0
Recreational Swimming Pool	1.74	1000sqft	0.00	1,740.00	0
Apartments Mid Rise	310.00	Dwelling Unit	4.70	310,000.00	887

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	2			Operational Year	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	143.42	CH4 Intensity (lb/MW hr)	0.024	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assumes 33% renewable portfolio standard is achieved by 2019.

Land Use - Assume 12.5% of an average Olympic Size Pool (82,500/660,000 gal). Average Olympic pool has a surface area of 13,940sqft. Zeroed lot acreage are included in the footprint of commercial or res land uses.

Construction Phase - Demo: 1 week, Site Prep: 3 weeks, Grading: 5 months, Utilities:22 days, Building Construction: 24 months, Parking lot paving: 7 days, Architectural Coating: 0.5 months

Off-road Equipment - Assumed equipment use for installation of utilities.

Trips and VMT - Local landfill is approximately 10 miles away. Building material will likely come from Sacramento, average 30 miles away. Site is relatively flat - no grading hauling expected.

On-road Fugitive Dust - Majority of travel will be on paved roads

Demolition - Demolition of Redrum Burger (978 Olive Dr.) and Third Space Art Collective (946 Olive Dr.)

Grading - Total land use acres = total acres disturbed. Assume removed 46.9 acres of winter wheat removed at 2.5 tons per acre.

Architectural Coating - Arch Coating sqft corrected using Section 4.7 in Appendix A and Section 7 in Appendix E of the CalEEMod User's Guide

Vehicle Trips - Use offmodel calculations for mobile operational emissions

Woodstoves - Assume only for sale units have fireplaces. All fireplaces are gas.

Area Coating -

Energy Use - DEG calculated energy use and off-model energy emission calculations. Input DEG Natural Gas assumptions. Electricity emissions are calculated off-model.

Water And Wastewater - All water usage, except pool, from Cunningham Engineering. Assume pool will have default water usage. R&D water use is lumped under general office building. Davis' Water Pollution Control plan is 100% aerobic.

Land Use Change -

Sequestration - Assumption

Construction Off-road Equipment Mitigation - Mitigation needed for possible exceedance of NOx threshold.

Area Mitigation - Default

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	727,260.00	112,086.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,181,780.00	240,000.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	209,250.00	243,675.00

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	35.00	10.00
tblConstructionPhase	NumDays	440.00	506.00
tblConstructionPhase	NumDays	30.00	5.00
tblConstructionPhase	NumDays	45.00	108.00
tblConstructionPhase	NumDays	35.00	7.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	PhaseEndDate	7/1/2019	6/28/2019
tblConstructionPhase	PhaseEndDate	6/10/2019	6/6/2019
tblConstructionPhase	PhaseEndDate	1/6/2017	1/7/2017
tblConstructionPhase	PhaseEndDate	7/28/2017	6/30/2017
tblConstructionPhase	PhaseStartDate	6/18/2019	6/15/2019
tblConstructionPhase	PhaseStartDate	7/1/2017	6/29/2017
tblConstructionPhase	PhaseStartDate	6/29/2017	6/1/2017
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.62	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	2,554.47	0.00
tblEnergyUse	NT24E	3.62	0.00
tblEnergyUse	NT24E	4.20	0.00

tblEnergyUse	NT24NG	1,716.22	0.00
tblEnergyUse	NT24NG	0.47	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	T24E	322.48	0.00
tblEnergyUse	T24E	3.93	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24NG	8,261.25	12,822.00
tblEnergyUse	T24NG	16.83	31.00
tblEnergyUse	T24NG	0.00	37.00
tblEnergyUse	T24NG	19.55	31.00
tblFireplaces	FireplaceWoodMass	4,558.40	0.00
tblFireplaces	NumberGas	170.50	111.00
tblFireplaces	NumberNoFireplace	31.00	0.00
tblFireplaces	NumberWood	108.50	0.00
tblGrading	AcresOfGrading	270.00	46.90
tblGrading	MaterialExported	0.00	117.25
tblLandUse	LotAcreage	1.84	1.20
tblLandUse	LotAcreage	1.84	1.20
tblLandUse	LotAcreage	1.89	0.00
tblLandUse	LotAcreage	2.95	3.00
tblLandUse	LotAcreage	7.60	0.00
tblLandUse	LotAcreage	0.04	0.00
tblLandUse	LotAcreage	8.16	4.70
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00

tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	641.35	143.42
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2019
tblRoadDust	RoadPercentPave	94	100
tblSequestration	NumberOfNewTrees	0.00	20.00
tblSolidWaste	SolidWasteGenerationRate	142.60	142.14
tblSolidWaste	SolidWasteGenerationRate	1.71	1.68
tblSolidWaste	SolidWasteGenerationRate	9.92	79.46
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00

tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripNumber	292.00	20.00
tblTripsAndVMT	WorkerTripNumber	872.00	120.00
tblTripsAndVMT	WorkerTripNumber	174.00	120.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	32.93	0.00

tblVehicleTrips	WD_TR	8.11	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	20,197,747.94	17,665,221.00
tblWater	IndoorWaterUseRate	14,218,699.84	5,232,820.00
tblWater	IndoorWaterUseRate	102,909.07	824,455.43
tblWater	IndoorWaterUseRate	39,335,515.78	0.00
tblWater	OutdoorWaterUseRate	12,733,362.83	0.00
tblWater	OutdoorWaterUseRate	23,710,478.86	4,949,400.00
tblWater	OutdoorWaterUseRate	8,714,687.00	0.00
tblWater	OutdoorWaterUseRate	63,073.30	505,311.39
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	15.50	15.45
tblWoodstoves	NumberNoncatalytic	15.50	15.45
tblWoodstoves	WoodstoveWoodMass	4,558.40	0.00

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					
2017	7.3358	80.0197	55.4291	0.0744	31.5992	4.0934	34.2682	10.2692	3.7659	12.8053	0.0000	7,530.585 2	7,530.585 2	2.2360	0.0000	7,577.541 9
2018	3.4494	28.4890	25.5469	0.0577	29.4269	1.5985	31.0254	3.1997	1.5006	4.7003	0.0000	5,364.375 1	5,364.375 1	0.6912	0.0000	5,378.889 4
2019	699.7802	25.6496	24.4740	0.0576	29.4269	1.3816	30.8085	3.1997	1.2972	4.4969	0.0000	5,266.685 8	5,266.685 8	0.7648	0.0000	5,282.746 8
Total	710.5653	134.1583	105.4500	0.1897	90.4530	7.0734	96.1020	16.6686	6.5637	22.0025	0.0000	18,161.64 60	18,161.64 60	3.6920	0.0000	18,239.17 81

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					
2017	1.8591	35.0626	46.3829	0.0744	31.5992	1.6872	32.9762	4.8071	1.6871	5.7703	0.0000	7,530.585 2	7,530.585 2	2.2360	0.0000	7,577.541 8
2018	1.4519	19.4023	25.8298	0.0577	29.4269	1.0058	30.4327	3.1997	0.9974	4.1971	0.0000	5,364.375 1	5,364.375 1	0.6912	0.0000	5,378.889 4
2019	698.6963	18.8587	25.1693	0.0576	29.4269	0.9981	30.4251	3.1997	0.9905	4.1902	0.0000	5,266.685 8	5,266.685 8	0.7648	0.0000	5,282.746 8
Total	702.0073	73.3235	97.3821	0.1897	90.4530	3.6911	93.8339	11.2065	3.6749	14.1576	0.0000	18,161.64 60	18,161.64 60	3.6920	0.0000	18,239.17 81

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.20	45.35	7.65	0.00	0.00	47.82	2.36	32.77	44.01	35.65	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	48.3523	0.2992	25.8751	1.3600e-003		0.2903	0.2903		0.2887	0.2887	0.0000	2,396.9819	2,396.9819	0.0912	0.0431	2,412.2559
Energy	0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	48.6182	2.6523	27.4358	0.0159	0.0000	0.4740	0.4740	0.0000	0.4724	0.4724	0.0000	5,297.6104	5,297.6104	0.1468	0.0963	5,330.5372

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	48.1368	0.2992	25.8634	1.3600e-003		0.1414	0.1414		0.1414	0.1414	0.0000	46.3936	46.3936	0.0461	0.0000	47.3624
Energy	0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	48.4027	2.6523	27.4241	0.0159	0.0000	0.3251	0.3251	0.0000	0.3251	0.3251	0.0000	2,947.0222	2,947.0222	0.1017	0.0532	2,965.6437

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.44	0.00	0.04	0.00	0.00	31.41	31.41	0.00	31.18	31.18	0.00	44.37	44.37	30.69	44.76	44.37

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/7/2017	5	5	
2	Site Preparation	Site Preparation	1/8/2017	1/27/2017	5	15	
3	Grading	Grading	1/28/2017	6/28/2017	5	108	
4	Utilities	Trenching	6/1/2017	6/30/2017	5	22	
5	Building Construction	Building Construction	6/29/2017	6/6/2019	5	506	
6	Parking Lot Paving	Paving	6/7/2019	6/17/2019	5	7	
7	Architectural Coating	Architectural Coating	6/15/2019	6/28/2019	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 46.9

Acres of Paving: 0

Residential Indoor: 731,025; Residential Outdoor: 243,675; Non-Residential Indoor: 240,000; Non-Residential Outdoor: 112,086 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Utilities	Aerial Lifts	1	3.00	62	0.31
Utilities	Forklifts	1	3.00	89	0.20
Utilities	Rollers	1	7.00	80	0.38
Utilities	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Utilities	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	7.00	226	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
Parking Lot Paving	Pavers	2	8.00	125	0.42
Parking Lot Paving	Paving Equipment	2	8.00	130	0.36
Parking Lot 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
Demolition	6	15.00	0.00	50.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	12.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Utilities	5	13.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	120.00	20.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Parking Lot Paving	6	15.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2017

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					2.5452	0.0000	2.5452	0.3855	0.0000	0.3855			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	4.0482	42.6971	33.8934	0.0399	2.5452	2.1252	4.6704	0.3855	1.9797	2.3652		4,036.4674	4,036.4674	1.1073		4,059.7211

3.2 Demolition - 2017

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	0.1546	1.1930	1.8894	3.8200e-003	1.5585	0.0174	1.5759	0.1706	0.0160	0.1867		377.6986	377.6986	2.7600e-003		377.7565
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	0.0546	0.0534	0.6658	1.5600e-003	2.5065	8.5000e-004	2.5073	0.2703	7.8000e-004	0.2711		123.7592	123.7592	5.5000e-003		123.8747
Total	0.2092	1.2465	2.5552	5.3800e-003	4.0650	0.0183	4.0832	0.4410	0.0168	0.4578		501.4578	501.4578	8.2600e-003		501.6312

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					1.1454	0.0000	1.1454	0.1735	0.0000	0.1735			0.0000			0.0000
Off-Road	0.9478	18.7614	25.2649	0.0399		0.8817	0.8817		0.8817	0.8817	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	0.9478	18.7614	25.2649	0.0399	1.1454	0.8817	2.0270	0.1735	0.8817	1.0551	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211

3.2 Demolition - 2017

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	0.1546	1.1930	1.8894	3.8200e-003	1.5585	0.0174	1.5759	0.1706	0.0160	0.1867		377.6986	377.6986	2.7600e-003		377.7565
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	0.0546	0.0534	0.6658	1.5600e-003	2.5065	8.5000e-004	2.5073	0.2703	7.8000e-004	0.2711		123.7592	123.7592	5.5000e-003		123.8747
Total	0.2092	1.2465	2.5552	5.3800e-003	4.0650	0.0183	4.0832	0.4410	0.0168	0.4578		501.4578	501.4578	8.2600e-003		501.6312

3.3 Site Preparation - 2017

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					18.0693	0.0000	18.0693	9.9311	0.0000	9.9311			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	4.8382	51.7535	39.3970	0.0391	18.0693	2.7542	20.8235	9.9311	2.5339	12.4650		4,003.0859	4,003.0859	1.2265		4,028.8432

3.3 Site Preparation - 2017

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	0.0124	0.0954	0.1512	3.1000e-004	0.1247	1.4000e-003	0.1261	0.0137	1.2800e-003	0.0149		30.2159	30.2159	2.2000e-004		30.2205
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	0.0655	0.0641	0.7989	1.8700e-003	3.0077	1.0200e-003	3.0088	0.3244	9.4000e-004	0.3253		148.5110	148.5110	6.6000e-003		148.6496
Total	0.0779	0.1595	0.9501	2.1800e-003	3.1324	2.4200e-003	3.1348	0.3380	2.2200e-003	0.3403		178.7269	178.7269	6.8200e-003		178.8701

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					8.1312	0.0000	8.1312	4.4690	0.0000	4.4690			0.0000			0.0000
Off-Road	0.9515	19.4584	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	0.9515	19.4584	23.4003	0.0391	8.1312	0.9611	9.0923	4.4690	0.9611	5.4301	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432

3.3 Site Preparation - 2017

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	0.0124	0.0954	0.1512	3.1000e-004	0.1247	1.4000e-003	0.1261	0.0137	1.2800e-003	0.0149		30.2159	30.2159	2.2000e-004		30.2205
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	0.0655	0.0641	0.7989	1.8700e-003	3.0077	1.0200e-003	3.0088	0.3244	9.4000e-004	0.3253		148.5110	148.5110	6.6000e-003		148.6496
Total	0.0779	0.1595	0.9501	2.1800e-003	3.1324	2.4200e-003	3.1348	0.3380	2.2200e-003	0.3403		178.7269	178.7269	6.8200e-003		178.8701

3.4 Grading - 2017

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					6.4826	0.0000	6.4826	3.3600	0.0000	3.3600			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	6.0991	69.5920	46.8050	0.0617	6.4826	3.3172	9.7998	3.3600	3.0518	6.4118		6,313.3690	6,313.3690	1.9344		6,353.9915

3.4 Grading - 2017

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	0.0728	0.0712	0.8877	2.0800e-003	3.3419	1.1300e-003	3.3431	0.3604	1.0400e-003	0.3615		165.0122	165.0122	7.3300e-003			165.1662
Total	0.0728	0.0712	0.8877	2.0800e-003	3.3419	1.1300e-003	3.3431	0.3604	1.0400e-003	0.3615		165.0122	165.0122	7.3300e-003			165.1662

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					2.9172	0.0000	2.9172	1.5120	0.0000	1.5120			0.0000				0.0000
Off-Road	1.5128	29.7798	37.9432	0.0617		1.3234	1.3234		1.3234	1.3234	0.0000	6,313.3690	6,313.3690	1.9344			6,353.9915
Total	1.5128	29.7798	37.9432	0.0617	2.9172	1.3234	4.2406	1.5120	1.3234	2.8354	0.0000	6,313.3690	6,313.3690	1.9344			6,353.9915

3.4 Grading - 2017

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	0.0728	0.0712	0.8877	2.0800e-003	3.3419	1.1300e-003	3.3431	0.3604	1.0400e-003	0.3615		165.0122	165.0122	7.3300e-003		165.1662
Total	0.0728	0.0712	0.8877	2.0800e-003	3.3419	1.1300e-003	3.3431	0.3604	1.0400e-003	0.3615		165.0122	165.0122	7.3300e-003		165.1662

3.5 Utilities - 2017

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	1.1166	10.3102	7.1594	9.2300e-003		0.7743	0.7743		0.7124	0.7124		944.9460	944.9460	0.2895		951.0261
Total	1.1166	10.3102	7.1594	9.2300e-003		0.7743	0.7743		0.7124	0.7124		944.9460	944.9460	0.2895		951.0261

3.5 Utilities - 2017

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	0.0473	0.0463	0.5770	1.3500e-003	2.1723	7.3000e-004	2.1730	0.2343	6.8000e-004	0.2350		107.2580	107.2580	4.7700e-003		107.3580
Total	0.0473	0.0463	0.5770	1.3500e-003	2.1723	7.3000e-004	2.1730	0.2343	6.8000e-004	0.2350		107.2580	107.2580	4.7700e-003		107.3580

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	0.2262	5.1653	6.9751	9.2300e-003		0.3620	0.3620		0.3620	0.3620	0.0000	944.9460	944.9460	0.2895		951.0261
Total	0.2262	5.1653	6.9751	9.2300e-003		0.3620	0.3620		0.3620	0.3620	0.0000	944.9460	944.9460	0.2895		951.0261

3.5 Utilities - 2017

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	0.0473	0.0463	0.5770	1.3500e-003	2.1723	7.3000e-004	2.1730	0.2343	6.8000e-004	0.2350		107.2580	107.2580	4.7700e-003		107.3580
Total	0.0473	0.0463	0.5770	1.3500e-003	2.1723	7.3000e-004	2.1730	0.2343	6.8000e-004	0.2350		107.2580	107.2580	4.7700e-003		107.3580

3.6 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490

3.6 Building Construction - 2017

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	0.4273	5.4562	3.5607	0.0185	9.3754	0.1060	9.4813	1.0371	0.0974	1.1346		1,833.5796	1,833.5796	0.0124			1,833.8406
Worker	0.4366	0.4273	5.3260	0.0125	20.0516	6.7700e-003	20.0584	2.1626	6.2400e-003	2.1689		990.0735	990.0735	0.0440			990.9973
Total	0.8639	5.8835	8.8868	0.0309	29.4269	0.1127	29.5397	3.1997	0.1037	3.3034		2,823.6531	2,823.6531	0.0564			2,824.8380

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	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497			2,653.4490
Total	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497			2,653.4490

3.6 Building Construction - 2017

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	0.4273	5.4562	3.5607	0.0185	9.3754	0.1060	9.4813	1.0371	0.0974	1.1346		1,833.5796	1,833.5796	0.0124			1,833.8406
Worker	0.4366	0.4273	5.3260	0.0125	20.0516	6.7700e-003	20.0584	2.1626	6.2400e-003	2.1689		990.0735	990.0735	0.0440			990.9973
Total	0.8639	5.8835	8.8868	0.0309	29.4269	0.1127	29.5397	3.1997	0.1037	3.3034		2,823.6531	2,823.6531	0.0564			2,824.8380

3.6 Building Construction - 2018

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387			2,623.3517
Total	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387			2,623.3517

3.6 Building Construction - 2018

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	0.3883	4.8436	3.2404	0.0184	9.3753	0.0976	9.4729	1.0371	0.0898	1.1268		1,801.349 3	1,801.349 3	0.0120			1,801.601 1
Worker	0.3925	0.3845	4.7739	0.0125	20.0516	6.6000e-003	20.0582	2.1626	6.1000e-003	2.1687		953.0869	953.0869	0.0405			953.9367
Total	0.7807	5.2281	8.0142	0.0309	29.4269	0.1042	29.5311	3.1997	0.0959	3.2956		2,754.436 2	2,754.436 2	0.0525			2,755.537 7

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	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,609.938 9	2,609.938 9	0.6387			2,623.351 7
Total	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,609.938 9	2,609.938 9	0.6387			2,623.351 7

3.6 Building Construction - 2018

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	0.3883	4.8436	3.2404	0.0184	9.3753	0.0976	9.4729	1.0371	0.0898	1.1268		1,801.349 3	1,801.349 3	0.0120			1,801.601 1
Worker	0.3925	0.3845	4.7739	0.0125	20.0516	6.6000e-003	20.0582	2.1626	6.1000e-003	2.1687		953.0869	953.0869	0.0405			953.9367
Total	0.7807	5.2281	8.0142	0.0309	29.4269	0.1042	29.5311	3.1997	0.0959	3.2956		2,754.436 2	2,754.436 2	0.0525			2,755.537 7

3.6 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.761 8	2,580.761 8	0.6279			2,593.947 9
Total	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.761 8	2,580.761 8	0.6279			2,593.947 9

3.6 Building Construction - 2019

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	0.3612	4.3342	3.0141	0.0184	9.3753	0.0901	9.4654	1.0371	0.0829	1.1200		1,770.4613	1,770.4613	0.0115			1,770.7034
Worker	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494
Total	0.7201	4.6846	7.3537	0.0308	29.4269	0.0966	29.5235	3.1997	0.0889	3.2886		2,685.9240	2,685.9240	0.0490			2,686.9528

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	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,580.7618	2,580.7618	0.6279			2,593.9479
Total	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,580.7618	2,580.7618	0.6279			2,593.9479

3.6 Building Construction - 2019

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	0.3612	4.3342	3.0141	0.0184	9.3753	0.0901	9.4654	1.0371	0.0829	1.1200		1,770.4613	1,770.4613	0.0115			1,770.7034
Worker	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494
Total	0.7201	4.6846	7.3537	0.0308	29.4269	0.0966	29.5235	3.1997	0.0889	3.2886		2,685.9240	2,685.9240	0.0490			2,686.9528

3.7 Parking Lot Paving - 2019

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	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989			2,223.6499
Paving	1.1229					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.5487	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989			2,223.6499

3.7 Parking Lot Paving - 2019

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	0.0449	0.0438	0.5425	1.5500e-003	2.5065	8.1000e-004	2.5073	0.2703	7.5000e-004	0.2711		114.4328	114.4328	4.6800e-003			114.5312
Total	0.0449	0.0438	0.5425	1.5500e-003	2.5065	8.1000e-004	2.5073	0.2703	7.5000e-004	0.2711		114.4328	114.4328	4.6800e-003			114.5312

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	0.5490	11.0645	16.9276	0.0223		0.5982	0.5982		0.5982	0.5982	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499
Paving	1.1229					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.6719	11.0645	16.9276	0.0223		0.5982	0.5982		0.5982	0.5982	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499

3.7 Parking Lot Paving - 2019

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	0.0449	0.0438	0.5425	1.5500e-003	2.5065	8.1000e-004	2.5073	0.2703	7.5000e-004	0.2711		114.4328	114.4328	4.6800e-003			114.5312
Total	0.0449	0.0438	0.5425	1.5500e-003	2.5065	8.1000e-004	2.5073	0.2703	7.5000e-004	0.2711		114.4328	114.4328	4.6800e-003			114.5312

3.8 Architectural Coating - 2019

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	696.5612					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238			281.9473
Total	696.8277	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238			281.9473

3.8 Architectural Coating - 2019

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	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494
Total	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494

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	696.5612					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0238			281.9473
Total	696.6207	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0238			281.9473

3.8 Architectural Coating - 2019

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	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494
Total	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.480588	0.067655	0.152308	0.148424	0.059174	0.006668	0.036554	0.035496	0.000914	0.001885	0.007619	0.000654	0.002062

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813
NaturalGas Unmitigated	0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813

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					
City Park	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
Enclosed Parking Structure	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
General Office Building	6794.52	0.0733	0.6661	0.5596	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.3554	799.3554	0.0153	0.0147	804.2201
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
Recreational Swimming Pool	176.384	1.9000e-003	0.0173	0.0145	1.0000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003		20.7510	20.7510	4.0000e-004	3.8000e-004	20.8773
Research & Development	6794.52	0.0733	0.6661	0.5596	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.3554	799.3554	0.0153	0.0147	804.2201
Unenclosed Parking with Elevator	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
Apartments Mid Rise	10889.9	0.1174	1.0036	0.4271	6.4100e-003		0.0811	0.0811		0.0811	0.0811		1,281.1668	1,281.1668	0.0246	0.0235	1,288.9638
Total		0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813

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					
City Park	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
Enclosed Parking Structure	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
General Office Building	6.79452	0.0733	0.6661	0.5596	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.3554	799.3554	0.0153	0.0147	804.2201
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
Recreational Swimming Pool	0.176384	1.9000e-003	0.0173	0.0145	1.0000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003		20.7510	20.7510	4.0000e-004	3.8000e-004	20.8773
Research & Development	6.79452	0.0733	0.6661	0.5596	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.3554	799.3554	0.0153	0.0147	804.2201
Unenclosed Parking with Elevator	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
Apartments Mid Rise	10.8899	0.1174	1.0036	0.4271	6.4100e-003		0.0811	0.0811		0.0811	0.0811		1,281.1668	1,281.1668	0.0246	0.0235	1,288.9638
Total		0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

No Hearths Installed

	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	48.1368	0.2992	25.8634	1.3600e-003		0.1414	0.1414		0.1414	0.1414	0.0000	46.3936	46.3936	0.0461	0.0000	47.3624
Unmitigated	48.3523	0.2992	25.8751	1.3600e-003		0.2903	0.2903		0.2887	0.2887	0.0000	2,396.9819	2,396.9819	0.0912	0.0431	2,412.2559

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	6.8506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.4842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2155	1.0000e-005	0.0118	0.0000		0.1489	0.1489		0.1473	0.1473	0.0000	2,350.5882	2,350.5882	0.0451	0.0431	2,364.8935
Landscaping	0.8021	0.2992	25.8634	1.3600e-003		0.1414	0.1414		0.1414	0.1414		46.3936	46.3936	0.0461		47.3624
Total	48.3523	0.2992	25.8751	1.3600e-003		0.2903	0.2903		0.2887	0.2887	0.0000	2,396.9819	2,396.9819	0.0912	0.0431	2,412.2559

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	6.8506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.4842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8021	0.2992	25.8634	1.3600e-003		0.1414	0.1414		0.1414	0.1414		46.3936	46.3936	0.0461		47.3624
Total	48.1368	0.2992	25.8634	1.3600e-003		0.1414	0.1414		0.1414	0.1414	0.0000	46.3936	46.3936	0.0461	0.0000	47.3624

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Reclaimed Water

Use Grey Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Nishi Development Project - Phase 1 (Mitigated)
Yolo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	80.00	1000sqft	1.20	80,000.00	0
Research & Development	80.00	1000sqft	1.20	80,000.00	0
Enclosed Parking Structure	210.00	Space	0.00	84,000.00	0
Parking Lot	328.00	Space	3.00	131,200.00	0
Unenclosed Parking with Elevator	845.00	Space	0.00	338,000.00	0
City Park	19.90	Acre	19.90	866,844.00	0
Recreational Swimming Pool	1.74	1000sqft	0.00	1,740.00	0
Apartments Mid Rise	310.00	Dwelling Unit	4.70	310,000.00	887

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	2			Operational Year	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	143.42	CH4 Intensity (lb/MW hr)	0.024	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assumes 33% renewable portfolio standard is achieved by 2019.

Land Use - Assume 12.5% of an average Olympic Size Pool (82,500/660,000 gal). Average Olympic pool has a surface area of 13,940sqft. Zeroed lot acreage are included in the footprint of commercial or res land uses.

Construction Phase - Demo: 1 week, Site Prep: 3 weeks, Grading: 5 months, Utilities:22 days, Building Construction: 24 months, Parking lot paving: 7 days, Architectural Coating: 0.5 months

Off-road Equipment - Assumed equipment use for installation of utilities.

Trips and VMT - Local landfill is approximately 10 miles away. Building material will likely come from Sacramento, average 30 miles away. Site is relatively flat - no grading hauling expected.

On-road Fugitive Dust - Majority of travel will be on paved roads

Demolition - Demolition of Redrum Burger (978 Olive Dr.) and Third Space Art Collective (946 Olive Dr.)

Grading - Total land use acres = total acres disturbed. Assume removed 46.9 acres of winter wheat removed at 2.5 tons per acre.

Architectural Coating - Arch Coating sqft corrected using Section 4.7 in Appendix A and Section 7 in Appendix E of the CalEEMod User's Guide

Vehicle Trips - Use offmodel calculations for mobile operational emissions

Woodstoves - Assume only for sale units have fireplaces. All fireplaces are gas.

Area Coating -

Energy Use - DEG calculated energy use and off-model energy emission calculations. Input DEG Natural Gas assumptions. Electricity emissions are calculated off-model.

Water And Wastewater - All water usage, except pool, from Cunningham Engineering. Assume pool will have default water usage. R&D water use is lumped under general office building. Davis' Water Pollution Control plan is 100% aerobic.

Sequestration - Assumption

Construction Off-road Equipment Mitigation - Mitigation needed for possible exceedance of NOx threshold.

Area Mitigation - Mitigation needed to reduce ROG emissions to below thresholds

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	727,260.00	112,086.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,181,780.00	240,000.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	209,250.00	243,675.00
tblArchitecturalCoating	ConstArea_Residential_Interior	627,750.00	731,025.00

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	35.00	10.00
tblConstructionPhase	NumDays	440.00	506.00
tblConstructionPhase	NumDays	30.00	5.00
tblConstructionPhase	NumDays	45.00	108.00
tblConstructionPhase	NumDays	35.00	7.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	PhaseEndDate	7/1/2019	6/28/2019
tblConstructionPhase	PhaseEndDate	6/10/2019	6/6/2019
tblConstructionPhase	PhaseEndDate	1/6/2017	1/7/2017
tblConstructionPhase	PhaseEndDate	7/28/2017	6/30/2017
tblConstructionPhase	PhaseStartDate	6/18/2019	6/15/2019
tblConstructionPhase	PhaseStartDate	7/1/2017	6/29/2017
tblConstructionPhase	PhaseStartDate	6/29/2017	6/1/2017
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.62	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	2,554.47	0.00
tblEnergyUse	NT24E	3.62	0.00
tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24NG	1,716.22	0.00

tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	641.35	143.42
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2019
tblRoadDust	RoadPercentPave	94	100
tblSequestration	NumberOfNewTrees	0.00	20.00
tblSolidWaste	SolidWasteGenerationRate	142.60	142.14
tblSolidWaste	SolidWasteGenerationRate	1.71	1.68
tblSolidWaste	SolidWasteGenerationRate	9.92	79.46
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00

tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripNumber	292.00	20.00
tblTripsAndVMT	WorkerTripNumber	872.00	120.00
tblTripsAndVMT	WorkerTripNumber	174.00	120.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	8.11	0.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	20,197,747.94	17,665,221.00
tblWater	IndoorWaterUseRate	14,218,699.84	5,232,820.00
tblWater	IndoorWaterUseRate	102,909.07	824,455.43
tblWater	IndoorWaterUseRate	39,335,515.78	0.00
tblWater	OutdoorWaterUseRate	12,733,362.83	0.00
tblWater	OutdoorWaterUseRate	23,710,478.86	4,949,400.00
tblWater	OutdoorWaterUseRate	8,714,687.00	0.00
tblWater	OutdoorWaterUseRate	63,073.30	505,311.39
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	15.50	15.45
tblWoodstoves	NumberNoncatalytic	15.50	15.45
tblWoodstoves	WoodstoveWoodMass	4,558.40	0.00

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					
2017	7.3358	80.0197	55.4291	0.0744	31.5992	4.0934	34.2682	10.2692	3.7659	12.8053	0.0000	7,530.585 2	7,530.585 2	2.2360	0.0000	7,577.541 9
2018	3.4494	28.4890	25.5469	0.0577	29.4269	1.5985	31.0254	3.1997	1.5006	4.7003	0.0000	5,364.375 1	5,364.375 1	0.6912	0.0000	5,378.889 4
2019	699.7802	25.6496	24.4740	0.0576	29.4269	1.3816	30.8085	3.1997	1.2972	4.4969	0.0000	5,266.685 8	5,266.685 8	0.7648	0.0000	5,282.746 8
Total	710.5653	134.1583	105.4500	0.1897	90.4530	7.0734	96.1020	16.6686	6.5637	22.0025	0.0000	18,161.64 60	18,161.64 60	3.6920	0.0000	18,239.17 81

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					
2017	1.8591	35.0626	46.3829	0.0744	31.5992	1.6872	32.9762	4.8071	1.6871	5.7703	0.0000	7,530.585 2	7,530.585 2	2.2360	0.0000	7,577.541 8
2018	1.4519	19.4023	25.8298	0.0577	29.4269	1.0058	30.4327	3.1997	0.9974	4.1971	0.0000	5,364.375 1	5,364.375 1	0.6912	0.0000	5,378.889 4
2019	698.6963	18.8587	25.1693	0.0576	29.4269	0.9981	30.4251	3.1997	0.9905	4.1902	0.0000	5,266.685 8	5,266.685 8	0.7648	0.0000	5,282.746 8
Total	702.0073	73.3235	97.3821	0.1897	90.4530	3.6911	93.8339	11.2065	3.6749	14.1576	0.0000	18,161.64 60	18,161.64 60	3.6920	0.0000	18,239.17 81

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.20	45.35	7.65	0.00	0.00	47.82	2.36	32.77	44.01	35.65	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	48.3523	0.2992	25.8751	1.3600e-003		0.2903	0.2903		0.2887	0.2887	0.0000	2,396.9819	2,396.9819	0.0912	0.0431	2,412.2559
Energy	0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	48.6182	2.6523	27.4358	0.0159	0.0000	0.4740	0.4740	0.0000	0.4724	0.4724	0.0000	5,297.6104	5,297.6104	0.1468	0.0963	5,330.5372

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	44.9197	0.2673	22.7336	1.1200e-003		0.1231	0.1231		0.1231	0.1231	0.0000	39.4013	39.4013	0.0350	0.0000	40.1367
Energy	0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	45.1855	2.6204	24.2943	0.0156	0.0000	0.3068	0.3068	0.0000	0.3068	0.3068	0.0000	2,940.0299	2,940.0299	0.0906	0.0532	2,958.4180

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.06	1.20	11.45	1.51	0.00	35.27	35.27	0.00	35.05	35.05	0.00	44.50	44.50	38.26	44.76	44.50

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/7/2017	5	5	
2	Site Preparation	Site Preparation	1/8/2017	1/27/2017	5	15	
3	Grading	Grading	1/28/2017	6/28/2017	5	108	
4	Utilities	Trenching	6/1/2017	6/30/2017	5	22	
5	Building Construction	Building Construction	6/29/2017	6/6/2019	5	506	
6	Parking Lot Paving	Paving	6/7/2019	6/17/2019	5	7	
7	Architectural Coating	Architectural Coating	6/15/2019	6/28/2019	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 46.9

Acres of Paving: 0

Residential Indoor: 731,025; Residential Outdoor: 243,675; Non-Residential Indoor: 240,000; Non-Residential Outdoor: 112,086 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Utilities	Aerial Lifts	1	3.00	62	0.31
Utilities	Forklifts	1	3.00	89	0.20
Utilities	Rollers	1	7.00	80	0.38
Utilities	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Utilities	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	7.00	226	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
Parking Lot Paving	Pavers	2	8.00	125	0.42
Parking Lot Paving	Paving Equipment	2	8.00	130	0.36
Parking Lot 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
Demolition	6	15.00	0.00	50.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	12.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Utilities	5	13.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	120.00	20.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Parking Lot Paving	6	15.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2017

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					2.5452	0.0000	2.5452	0.3855	0.0000	0.3855			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	4.0482	42.6971	33.8934	0.0399	2.5452	2.1252	4.6704	0.3855	1.9797	2.3652		4,036.4674	4,036.4674	1.1073		4,059.7211

3.2 Demolition - 2017

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	0.1546	1.1930	1.8894	3.8200e-003	1.5585	0.0174	1.5759	0.1706	0.0160	0.1867		377.6986	377.6986	2.7600e-003		377.7565
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	0.0546	0.0534	0.6658	1.5600e-003	2.5065	8.5000e-004	2.5073	0.2703	7.8000e-004	0.2711		123.7592	123.7592	5.5000e-003		123.8747
Total	0.2092	1.2465	2.5552	5.3800e-003	4.0650	0.0183	4.0832	0.4410	0.0168	0.4578		501.4578	501.4578	8.2600e-003		501.6312

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					1.1454	0.0000	1.1454	0.1735	0.0000	0.1735			0.0000			0.0000
Off-Road	0.9478	18.7614	25.2649	0.0399		0.8817	0.8817		0.8817	0.8817	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	0.9478	18.7614	25.2649	0.0399	1.1454	0.8817	2.0270	0.1735	0.8817	1.0551	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211

3.2 Demolition - 2017

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	0.1546	1.1930	1.8894	3.8200e-003	1.5585	0.0174	1.5759	0.1706	0.0160	0.1867		377.6986	377.6986	2.7600e-003		377.7565
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	0.0546	0.0534	0.6658	1.5600e-003	2.5065	8.5000e-004	2.5073	0.2703	7.8000e-004	0.2711		123.7592	123.7592	5.5000e-003		123.8747
Total	0.2092	1.2465	2.5552	5.3800e-003	4.0650	0.0183	4.0832	0.4410	0.0168	0.4578		501.4578	501.4578	8.2600e-003		501.6312

3.3 Site Preparation - 2017

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					18.0693	0.0000	18.0693	9.9311	0.0000	9.9311			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	4.8382	51.7535	39.3970	0.0391	18.0693	2.7542	20.8235	9.9311	2.5339	12.4650		4,003.0859	4,003.0859	1.2265		4,028.8432

3.3 Site Preparation - 2017

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	0.0124	0.0954	0.1512	3.1000e-004	0.1247	1.4000e-003	0.1261	0.0137	1.2800e-003	0.0149		30.2159	30.2159	2.2000e-004			30.2205
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	0.0655	0.0641	0.7989	1.8700e-003	3.0077	1.0200e-003	3.0088	0.3244	9.4000e-004	0.3253		148.5110	148.5110	6.6000e-003			148.6496
Total	0.0779	0.1595	0.9501	2.1800e-003	3.1324	2.4200e-003	3.1348	0.3380	2.2200e-003	0.3403		178.7269	178.7269	6.8200e-003			178.8701

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					8.1312	0.0000	8.1312	4.4690	0.0000	4.4690			0.0000				0.0000
Off-Road	0.9515	19.4584	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,003.0859	4,003.0859	1.2265			4,028.8432
Total	0.9515	19.4584	23.4003	0.0391	8.1312	0.9611	9.0923	4.4690	0.9611	5.4301	0.0000	4,003.0859	4,003.0859	1.2265			4,028.8432

3.3 Site Preparation - 2017

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	0.0124	0.0954	0.1512	3.1000e-004	0.1247	1.4000e-003	0.1261	0.0137	1.2800e-003	0.0149		30.2159	30.2159	2.2000e-004		30.2205
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	0.0655	0.0641	0.7989	1.8700e-003	3.0077	1.0200e-003	3.0088	0.3244	9.4000e-004	0.3253		148.5110	148.5110	6.6000e-003		148.6496
Total	0.0779	0.1595	0.9501	2.1800e-003	3.1324	2.4200e-003	3.1348	0.3380	2.2200e-003	0.3403		178.7269	178.7269	6.8200e-003		178.8701

3.4 Grading - 2017

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					6.4826	0.0000	6.4826	3.3600	0.0000	3.3600			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	6.0991	69.5920	46.8050	0.0617	6.4826	3.3172	9.7998	3.3600	3.0518	6.4118		6,313.3690	6,313.3690	1.9344		6,353.9915

3.4 Grading - 2017

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	0.0728	0.0712	0.8877	2.0800e-003	3.3419	1.1300e-003	3.3431	0.3604	1.0400e-003	0.3615		165.0122	165.0122	7.3300e-003			165.1662
Total	0.0728	0.0712	0.8877	2.0800e-003	3.3419	1.1300e-003	3.3431	0.3604	1.0400e-003	0.3615		165.0122	165.0122	7.3300e-003			165.1662

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					2.9172	0.0000	2.9172	1.5120	0.0000	1.5120			0.0000				0.0000
Off-Road	1.5128	29.7798	37.9432	0.0617		1.3234	1.3234		1.3234	1.3234	0.0000	6,313.3690	6,313.3690	1.9344			6,353.9915
Total	1.5128	29.7798	37.9432	0.0617	2.9172	1.3234	4.2406	1.5120	1.3234	2.8354	0.0000	6,313.3690	6,313.3690	1.9344			6,353.9915

3.4 Grading - 2017

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	0.0728	0.0712	0.8877	2.0800e-003	3.3419	1.1300e-003	3.3431	0.3604	1.0400e-003	0.3615		165.0122	165.0122	7.3300e-003			165.1662
Total	0.0728	0.0712	0.8877	2.0800e-003	3.3419	1.1300e-003	3.3431	0.3604	1.0400e-003	0.3615		165.0122	165.0122	7.3300e-003			165.1662

3.5 Utilities - 2017

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	1.1166	10.3102	7.1594	9.2300e-003		0.7743	0.7743		0.7124	0.7124		944.9460	944.9460	0.2895			951.0261
Total	1.1166	10.3102	7.1594	9.2300e-003		0.7743	0.7743		0.7124	0.7124		944.9460	944.9460	0.2895			951.0261

3.5 Utilities - 2017

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	0.0473	0.0463	0.5770	1.3500e-003	2.1723	7.3000e-004	2.1730	0.2343	6.8000e-004	0.2350		107.2580	107.2580	4.7700e-003			107.3580
Total	0.0473	0.0463	0.5770	1.3500e-003	2.1723	7.3000e-004	2.1730	0.2343	6.8000e-004	0.2350		107.2580	107.2580	4.7700e-003			107.3580

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	0.2262	5.1653	6.9751	9.2300e-003		0.3620	0.3620		0.3620	0.3620	0.0000	944.9460	944.9460	0.2895			951.0261
Total	0.2262	5.1653	6.9751	9.2300e-003		0.3620	0.3620		0.3620	0.3620	0.0000	944.9460	944.9460	0.2895			951.0261

3.5 Utilities - 2017

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	0.0473	0.0463	0.5770	1.3500e-003	2.1723	7.3000e-004	2.1730	0.2343	6.8000e-004	0.2350		107.2580	107.2580	4.7700e-003			107.3580
Total	0.0473	0.0463	0.5770	1.3500e-003	2.1723	7.3000e-004	2.1730	0.2343	6.8000e-004	0.2350		107.2580	107.2580	4.7700e-003			107.3580

3.6 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497			2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497			2,653.4490

3.6 Building Construction - 2017

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	0.4273	5.4562	3.5607	0.0185	9.3754	0.1060	9.4813	1.0371	0.0974	1.1346		1,833.5796	1,833.5796	0.0124			1,833.8406
Worker	0.4366	0.4273	5.3260	0.0125	20.0516	6.7700e-003	20.0584	2.1626	6.2400e-003	2.1689		990.0735	990.0735	0.0440			990.9973
Total	0.8639	5.8835	8.8868	0.0309	29.4269	0.1127	29.5397	3.1997	0.1037	3.3034		2,823.6531	2,823.6531	0.0564			2,824.8380

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	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497			2,653.4490
Total	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497			2,653.4490

3.6 Building Construction - 2017

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	0.4273	5.4562	3.5607	0.0185	9.3754	0.1060	9.4813	1.0371	0.0974	1.1346		1,833.5796	1,833.5796	0.0124			1,833.8406
Worker	0.4366	0.4273	5.3260	0.0125	20.0516	6.7700e-003	20.0584	2.1626	6.2400e-003	2.1689		990.0735	990.0735	0.0440			990.9973
Total	0.8639	5.8835	8.8868	0.0309	29.4269	0.1127	29.5397	3.1997	0.1037	3.3034		2,823.6531	2,823.6531	0.0564			2,824.8380

3.6 Building Construction - 2018

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387			2,623.3517
Total	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387			2,623.3517

3.6 Building Construction - 2018

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	0.3883	4.8436	3.2404	0.0184	9.3753	0.0976	9.4729	1.0371	0.0898	1.1268		1,801.349 3	1,801.349 3	0.0120			1,801.601 1
Worker	0.3925	0.3845	4.7739	0.0125	20.0516	6.6000e-003	20.0582	2.1626	6.1000e-003	2.1687		953.0869	953.0869	0.0405			953.9367
Total	0.7807	5.2281	8.0142	0.0309	29.4269	0.1042	29.5311	3.1997	0.0959	3.2956		2,754.436 2	2,754.436 2	0.0525			2,755.537 7

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	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,609.938 9	2,609.938 9	0.6387			2,623.351 7
Total	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,609.938 9	2,609.938 9	0.6387			2,623.351 7

3.6 Building Construction - 2018

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	0.3883	4.8436	3.2404	0.0184	9.3753	0.0976	9.4729	1.0371	0.0898	1.1268		1,801.349 3	1,801.349 3	0.0120			1,801.601 1
Worker	0.3925	0.3845	4.7739	0.0125	20.0516	6.6000e-003	20.0582	2.1626	6.1000e-003	2.1687		953.0869	953.0869	0.0405			953.9367
Total	0.7807	5.2281	8.0142	0.0309	29.4269	0.1042	29.5311	3.1997	0.0959	3.2956		2,754.436 2	2,754.436 2	0.0525			2,755.537 7

3.6 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.761 8	2,580.761 8	0.6279			2,593.947 9
Total	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.761 8	2,580.761 8	0.6279			2,593.947 9

3.6 Building Construction - 2019

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	0.3612	4.3342	3.0141	0.0184	9.3753	0.0901	9.4654	1.0371	0.0829	1.1200		1,770.4613	1,770.4613	0.0115			1,770.7034
Worker	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494
Total	0.7201	4.6846	7.3537	0.0308	29.4269	0.0966	29.5235	3.1997	0.0889	3.2886		2,685.9240	2,685.9240	0.0490			2,686.9528

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	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,580.7618	2,580.7618	0.6279			2,593.9479
Total	0.6712	14.1741	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,580.7618	2,580.7618	0.6279			2,593.9479

3.6 Building Construction - 2019

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	0.3612	4.3342	3.0141	0.0184	9.3753	0.0901	9.4654	1.0371	0.0829	1.1200		1,770.4613	1,770.4613	0.0115			1,770.7034
Worker	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494
Total	0.7201	4.6846	7.3537	0.0308	29.4269	0.0966	29.5235	3.1997	0.0889	3.2886		2,685.9240	2,685.9240	0.0490			2,686.9528

3.7 Parking Lot Paving - 2019

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	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989			2,223.6499
Paving	1.1229					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.5487	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447		2,208.9731	2,208.9731	0.6989			2,223.6499

3.7 Parking Lot Paving - 2019

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	0.0449	0.0438	0.5425	1.5500e-003	2.5065	8.1000e-004	2.5073	0.2703	7.5000e-004	0.2711		114.4328	114.4328	4.6800e-003			114.5312
Total	0.0449	0.0438	0.5425	1.5500e-003	2.5065	8.1000e-004	2.5073	0.2703	7.5000e-004	0.2711		114.4328	114.4328	4.6800e-003			114.5312

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	0.5490	11.0645	16.9276	0.0223		0.5982	0.5982		0.5982	0.5982	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499
Paving	1.1229					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.6719	11.0645	16.9276	0.0223		0.5982	0.5982		0.5982	0.5982	0.0000	2,208.9731	2,208.9731	0.6989			2,223.6499

3.7 Parking Lot Paving - 2019

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	0.0449	0.0438	0.5425	1.5500e-003	2.5065	8.1000e-004	2.5073	0.2703	7.5000e-004	0.2711		114.4328	114.4328	4.6800e-003			114.5312
Total	0.0449	0.0438	0.5425	1.5500e-003	2.5065	8.1000e-004	2.5073	0.2703	7.5000e-004	0.2711		114.4328	114.4328	4.6800e-003			114.5312

3.8 Architectural Coating - 2019

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	696.5612					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238			281.9473
Total	696.8277	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238			281.9473

3.8 Architectural Coating - 2019

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	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494
Total	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494

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	696.5612					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0238			281.9473
Total	696.6207	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0238			281.9473

3.8 Architectural Coating - 2019

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	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494
Total	0.3589	0.3504	4.3396	0.0124	20.0516	6.4600e-003	20.0580	2.1626	5.9900e-003	2.1686		915.4627	915.4627	0.0375			916.2494

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.480588	0.067655	0.152308	0.148424	0.059174	0.006668	0.036554	0.035496	0.000914	0.001885	0.007619	0.000654	0.002062

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813
NaturalGas Unmitigated	0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813

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					
City Park	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
Enclosed Parking Structure	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
General Office Building	6794.52	0.0733	0.6661	0.5596	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.3554	799.3554	0.0153	0.0147	804.2201
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
Recreational Swimming Pool	176.384	1.9000e-003	0.0173	0.0145	1.0000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003		20.7510	20.7510	4.0000e-004	3.8000e-004	20.8773
Research & Development	6794.52	0.0733	0.6661	0.5596	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.3554	799.3554	0.0153	0.0147	804.2201
Unenclosed Parking with Elevator	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
Apartments Mid Rise	10889.9	0.1174	1.0036	0.4271	6.4100e-003		0.0811	0.0811		0.0811	0.0811		1,281.1668	1,281.1668	0.0246	0.0235	1,288.9638
Total		0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813

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						
City Park	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
Enclosed Parking Structure	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
General Office Building	6.79452	0.0733	0.6661	0.5596	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.3554	799.3554	0.0153	0.0147	804.2201	
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
Recreational Swimming Pool	0.176384	1.9000e-003	0.0173	0.0145	1.0000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003		20.7510	20.7510	4.0000e-004	3.8000e-004	20.8773	
Research & Development	6.79452	0.0733	0.6661	0.5596	4.0000e-003		0.0506	0.0506		0.0506	0.0506		799.3554	799.3554	0.0153	0.0147	804.2201	
Unenclosed Parking with Elevator	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
Apartments Mid Rise	10.8899	0.1174	1.0036	0.4271	6.4100e-003		0.0811	0.0811		0.0811	0.0811		1,281.1668	1,281.1668	0.0246	0.0235	1,288.9638	
Total		0.2659	2.3531	1.5607	0.0145		0.1837	0.1837		0.1837	0.1837		2,900.6285	2,900.6285	0.0556	0.0532	2,918.2813	

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

No Hearths Installed

Use Low VOC Cleaning Supplies

	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	44.9197	0.2673	22.7336	1.1200e-003		0.1231	0.1231		0.1231	0.1231	0.0000	39.4013	39.4013	0.0350	0.0000	40.1367
Unmitigated	48.3523	0.2992	25.8751	1.3600e-003		0.2903	0.2903		0.2887	0.2887	0.0000	2,396.9819	2,396.9819	0.0912	0.0431	2,412.2559

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	6.8506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.4842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2155	1.0000e-005	0.0118	0.0000		0.1489	0.1489		0.1473	0.1473	0.0000	2,350.5882	2,350.5882	0.0451	0.0431	2,364.8935
Landscaping	0.8021	0.2992	25.8634	1.3600e-003		0.1414	0.1414		0.1414	0.1414		46.3936	46.3936	0.0461		47.3624
Total	48.3523	0.2992	25.8751	1.3600e-003		0.2903	0.2903		0.2887	0.2887	0.0000	2,396.9819	2,396.9819	0.0912	0.0431	2,412.2559

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	6.8506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.4573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6117	0.2673	22.7336	1.1200e-003		0.1231	0.1231		0.1231	0.1231		39.4013	39.4013	0.0350		40.1367
Total	44.9197	0.2673	22.7336	1.1200e-003		0.1231	0.1231		0.1231	0.1231	0.0000	39.4013	39.4013	0.0350	0.0000	40.1367

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Reclaimed Water

Use Grey Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Nishi Development Project - Phase 1 (Unmitigated)
Yolo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	80.00	1000sqft	1.20	80,000.00	0
Research & Development	80.00	1000sqft	1.20	80,000.00	0
Enclosed Parking Structure	210.00	Space	0.00	84,000.00	0
Parking Lot	328.00	Space	3.00	131,200.00	0
Unenclosed Parking with Elevator	845.00	Space	0.00	338,000.00	0
City Park	19.90	Acre	19.90	866,844.00	0
Recreational Swimming Pool	1.74	1000sqft	0.00	1,740.00	0
Apartments Mid Rise	310.00	Dwelling Unit	4.70	310,000.00	887

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	2			Operational Year	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	143.42	CH4 Intensity (lb/MW hr)	0.024	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assumes 33% renewable portfolio standard is achieved by 2019.

Land Use - Assume 12.5% of an average Olympic Size Pool (82,500/660,000 gal). Average Olympic pool has a surface area of 13,940sqft. Zeroed lot acreage are included in the footprint of commercial or res land uses.

Construction Phase - Demo: 1 week, Site Prep: 3 weeks, Grading: 5 months, Utilities:22 days, Building Construction: 24 months, Parking lot paving: 7 days, Architectural Coating: 0.5 months

Off-road Equipment - Assumed equipment use for installation of utilities.

Trips and VMT - Local landfill is approximately 10 miles away. Building material will likely come from Sacramento, average 30 miles away. Site is relatively flat - no grading hauling expected.

On-road Fugitive Dust - Majority of travel will be on paved roads

Demolition - Demolition of Redrum Burger (978 Olive Dr.) and Third Space Art Collective (946 Olive Dr.)

Grading - Total land use acres = total acres disturbed. Assume removed 46.9 acres of winter wheat removed at 2.5 tons per acre.

Architectural Coating - Arch Coating sqft corrected using Section 4.7 in Appendix A and Section 7 in Appendix E of the CalEEMod User's Guide

Vehicle Trips - Use offmodel calculations for mobile operational emissions

Woodstoves - Assume only for sale units have fireplaces. All fireplaces are gas.

Area Coating -

Energy Use - DEG calculated energy use and off-model energy emission calculations. Input DEG Natural Gas assumptions. Electricity emissions are calculated off-model.

Water And Wastewater - All water usage, except pool, from Cunningham Engineering. Assume pool will have default water usage. R&D water use is lumped under general office building. Davis' Water Pollution Control plan is 100% aerobic.

Land Use Change -

Sequestration - Assumption

Construction Off-road Equipment Mitigation - Mitigation needed for possible exceedance of NOx threshold.

Area Mitigation - Default

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	727,260.00	112,086.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,181,780.00	240,000.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	209,250.00	243,675.00

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	35.00	10.00
tblConstructionPhase	NumDays	440.00	506.00
tblConstructionPhase	NumDays	30.00	5.00
tblConstructionPhase	NumDays	45.00	108.00
tblConstructionPhase	NumDays	35.00	7.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	PhaseEndDate	7/1/2019	6/28/2019
tblConstructionPhase	PhaseEndDate	6/10/2019	6/6/2019
tblConstructionPhase	PhaseEndDate	1/6/2017	1/7/2017
tblConstructionPhase	PhaseEndDate	7/28/2017	6/30/2017
tblConstructionPhase	PhaseStartDate	6/18/2019	6/15/2019
tblConstructionPhase	PhaseStartDate	7/1/2017	6/29/2017
tblConstructionPhase	PhaseStartDate	6/29/2017	6/1/2017
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.62	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	2,554.47	0.00
tblEnergyUse	NT24E	3.62	0.00
tblEnergyUse	NT24E	4.20	0.00

tblEnergyUse	NT24NG	1,716.22	0.00
tblEnergyUse	NT24NG	0.47	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	T24E	322.48	0.00
tblEnergyUse	T24E	3.93	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24NG	8,261.25	12,822.00
tblEnergyUse	T24NG	16.83	31.00
tblEnergyUse	T24NG	0.00	37.00
tblEnergyUse	T24NG	19.55	31.00
tblFireplaces	FireplaceWoodMass	4,558.40	0.00
tblFireplaces	NumberGas	170.50	111.00
tblFireplaces	NumberNoFireplace	31.00	0.00
tblFireplaces	NumberWood	108.50	0.00
tblGrading	AcresOfGrading	270.00	46.90
tblGrading	MaterialExported	0.00	117.25
tblLandUse	LotAcreage	1.84	1.20
tblLandUse	LotAcreage	1.84	1.20
tblLandUse	LotAcreage	1.89	0.00
tblLandUse	LotAcreage	2.95	3.00
tblLandUse	LotAcreage	7.60	0.00
tblLandUse	LotAcreage	0.04	0.00
tblLandUse	LotAcreage	8.16	4.70
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00

tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	641.35	143.42
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2019
tblRoadDust	RoadPercentPave	94	100
tblSequestration	NumberOfNewTrees	0.00	20.00
tblSolidWaste	SolidWasteGenerationRate	142.60	142.14
tblSolidWaste	SolidWasteGenerationRate	1.71	1.68
tblSolidWaste	SolidWasteGenerationRate	9.92	79.46
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00

tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripNumber	292.00	20.00
tblTripsAndVMT	WorkerTripNumber	872.00	120.00
tblTripsAndVMT	WorkerTripNumber	174.00	120.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	32.93	0.00

tblVehicleTrips	WD_TR	8.11	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	20,197,747.94	17,665,221.00
tblWater	IndoorWaterUseRate	14,218,699.84	5,232,820.00
tblWater	IndoorWaterUseRate	102,909.07	824,455.43
tblWater	IndoorWaterUseRate	39,335,515.78	0.00
tblWater	OutdoorWaterUseRate	12,733,362.83	0.00
tblWater	OutdoorWaterUseRate	23,710,478.86	4,949,400.00
tblWater	OutdoorWaterUseRate	8,714,687.00	0.00
tblWater	OutdoorWaterUseRate	63,073.30	505,311.39
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	15.50	15.45
tblWoodstoves	NumberNoncatalytic	15.50	15.45
tblWoodstoves	WoodstoveWoodMass	4,558.40	0.00

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					
2017	0.6516	6.5320	4.8309	7.7000e-003	2.3628	0.3388	2.7015	0.4624	0.3140	0.7764	0.0000	687.2035	687.2035	0.1513	0.0000	690.3800
2018	0.4443	3.7619	3.3402	7.3800e-003	3.2955	0.2086	3.5041	0.3623	0.1959	0.5582	0.0000	624.4836	624.4836	0.0818	0.0000	626.2020
2019	3.6658	1.5298	1.4674	3.3400e-003	1.5203	0.0816	1.6019	0.1671	0.0766	0.2436	0.0000	277.9365	277.9365	0.0372	0.0000	278.7179
Total	4.7618	11.8236	9.6384	0.0184	7.1785	0.6290	7.8075	0.9918	0.5864	1.5782	0.0000	1,589.6235	1,589.6235	0.2703	0.0000	1,595.2999

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					
2017	0.1968	3.2162	4.1881	7.7000e-003	2.0922	0.1519	2.2441	0.3211	0.1513	0.4724	0.0000	687.2029	687.2029	0.1513	0.0000	690.3794
2018	0.1837	2.5760	3.3771	7.3800e-003	3.2955	0.1313	3.4267	0.3623	0.1302	0.4925	0.0000	624.4832	624.4832	0.0818	0.0000	626.2016
2019	3.5668	1.1302	1.5156	3.3400e-003	1.5203	0.0590	1.5793	0.1671	0.0586	0.2256	0.0000	277.9363	277.9363	0.0372	0.0000	278.7177
Total	3.9472	6.9224	9.0807	0.0184	6.9080	0.3422	7.2502	0.8505	0.3401	1.1906	0.0000	1,589.6224	1,589.6224	0.2703	0.0000	1,595.2987

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	17.11	41.45	5.79	0.00	3.77	45.59	7.14	14.25	42.01	24.56	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	tons/yr										MT/yr					
Area	8.7196	0.0269	2.3282	1.2000e-004		0.0188	0.0188		0.0188	0.0188	0.0000	91.2170	91.2170	5.4400e-003	1.6000e-003	91.8282
Energy	0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	578.0315	578.0315	0.0256	0.0122	582.3548
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	61.6605	0.0000	61.6605	3.6440	0.0000	138.1852
Water						0.0000	0.0000		0.0000	0.0000	8.3931	9.5925	17.9856	0.0305	0.0186	24.3878
Total	8.7682	0.4564	2.6130	2.7700e-003	0.0000	0.0524	0.0524	0.0000	0.0523	0.0523	70.0536	678.8410	748.8946	3.7055	0.0324	836.7559

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	8.7108	0.0269	2.3277	1.2000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	3.7879	3.7879	3.7700e-003	0.0000	3.8670
Energy	0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	578.0315	578.0315	0.0256	0.0122	582.3548
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	61.6605	0.0000	61.6605	3.6440	0.0000	138.1852
Water						0.0000	0.0000		0.0000	0.0000	8.3931	8.8147	17.2078	0.0304	0.0186	23.5988
Total	8.7593	0.4564	2.6125	2.7700e-003	0.0000	0.0463	0.0463	0.0000	0.0463	0.0463	70.0536	590.6341	660.6877	3.7037	0.0308	748.0058

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.10	0.00	0.02	0.00	0.00	11.65	11.65	0.00	11.55	11.55	0.00	12.99	11.78	0.05	5.03	10.61

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	14.1600
Vegetation Land Change	-222.2510
Total	-208.0910

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/7/2017	5	5	
2	Site Preparation	Site Preparation	1/8/2017	1/27/2017	5	15	
3	Grading	Grading	1/28/2017	6/28/2017	5	108	
4	Utilities	Trenching	6/1/2017	6/30/2017	5	22	
5	Building Construction	Building Construction	6/29/2017	6/6/2019	5	506	
6	Parking Lot Paving	Paving	6/7/2019	6/17/2019	5	7	
7	Architectural Coating	Architectural Coating	6/15/2019	6/28/2019	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 46.9

Acres of Paving: 0

Residential Indoor: 731,025; Residential Outdoor: 243,675; Non-Residential Indoor: 240,000; Non-Residential Outdoor: 112,086 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Utilities	Aerial Lifts	1	3.00	62	0.31
Utilities	Forklifts	1	3.00	89	0.20
Utilities	Rollers	1	7.00	80	0.38
Utilities	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Utilities	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	7.00	226	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
Parking Lot Paving	Pavers	2	8.00	125	0.42
Parking Lot Paving	Paving Equipment	2	8.00	130	0.36
Parking Lot 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
Demolition	6	15.00	0.00	50.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	12.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Utilities	5	13.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	120.00	20.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Parking Lot Paving	6	15.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2017

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					6.3600e-003	0.0000	6.3600e-003	9.6000e-004	0.0000	9.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.1067	0.0847	1.0000e-004		5.3100e-003	5.3100e-003		4.9500e-003	4.9500e-003	0.0000	9.1546	9.1546	2.5100e-003	0.0000	9.2073
Total	0.0101	0.1067	0.0847	1.0000e-004	6.3600e-003	5.3100e-003	0.0117	9.6000e-004	4.9500e-003	5.9100e-003	0.0000	9.1546	9.1546	2.5100e-003	0.0000	9.2073

3.2 Demolition - 2017

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	4.3000e-004	3.1500e-003	6.0500e-003	1.0000e-005	3.3500e-003	4.0000e-005	3.3900e-003	3.7000e-004	4.0000e-005	4.1000e-004	0.0000	0.8550	0.8550	1.0000e-005	0.0000	0.8551
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.4600e-003	0.0000	5.3700e-003	0.0000	5.3800e-003	5.9000e-004	0.0000	5.9000e-004	0.0000	0.2548	0.2548	1.0000e-005	0.0000	0.2551
Total	5.4000e-004	3.3000e-003	7.5100e-003	1.0000e-005	8.7200e-003	4.0000e-005	8.7700e-003	9.6000e-004	4.0000e-005	1.0000e-003	0.0000	1.1097	1.1097	2.0000e-005	0.0000	1.1101

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					2.8600e-003	0.0000	2.8600e-003	4.3000e-004	0.0000	4.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3700e-003	0.0469	0.0632	1.0000e-004		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003	0.0000	9.1545	9.1545	2.5100e-003	0.0000	9.2073
Total	2.3700e-003	0.0469	0.0632	1.0000e-004	2.8600e-003	2.2000e-003	5.0600e-003	4.3000e-004	2.2000e-003	2.6300e-003	0.0000	9.1545	9.1545	2.5100e-003	0.0000	9.2073

3.2 Demolition - 2017

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	4.3000e-004	3.1500e-003	6.0500e-003	1.0000e-005	3.3500e-003	4.0000e-005	3.3900e-003	3.7000e-004	4.0000e-005	4.1000e-004	0.0000	0.8550	0.8550	1.0000e-005	0.0000	0.8551
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.4600e-003	0.0000	5.3700e-003	0.0000	5.3800e-003	5.9000e-004	0.0000	5.9000e-004	0.0000	0.2548	0.2548	1.0000e-005	0.0000	0.2551
Total	5.4000e-004	3.3000e-003	7.5100e-003	1.0000e-005	8.7200e-003	4.0000e-005	8.7700e-003	9.6000e-004	4.0000e-005	1.0000e-003	0.0000	1.1097	1.1097	2.0000e-005	0.0000	1.1101

3.3 Site Preparation - 2017

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					0.1355	0.0000	0.1355	0.0745	0.0000	0.0745	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0363	0.3882	0.2955	2.9000e-004		0.0207	0.0207		0.0190	0.0190	0.0000	27.2365	27.2365	8.3500e-003	0.0000	27.4118
Total	0.0363	0.3882	0.2955	2.9000e-004	0.1355	0.0207	0.1562	0.0745	0.0190	0.0935	0.0000	27.2365	27.2365	8.3500e-003	0.0000	27.4118

3.3 Site Preparation - 2017

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	1.0000e-004	7.6000e-004	1.4500e-003	0.0000	8.0000e-004	1.0000e-005	8.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.2052	0.2052	0.0000	0.0000	0.2052
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	5.4000e-004	5.2400e-003	1.0000e-005	0.0194	1.0000e-005	0.0194	2.1100e-003	1.0000e-005	2.1100e-003	0.0000	0.9173	0.9173	4.0000e-005	0.0000	0.9182
Total	5.1000e-004	1.3000e-003	6.6900e-003	1.0000e-005	0.0202	2.0000e-005	0.0202	2.2000e-003	2.0000e-005	2.2100e-003	0.0000	1.1224	1.1224	4.0000e-005	0.0000	1.1234

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					0.0610	0.0000	0.0610	0.0335	0.0000	0.0335	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1400e-003	0.1459	0.1755	2.9000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	27.2365	27.2365	8.3500e-003	0.0000	27.4118
Total	7.1400e-003	0.1459	0.1755	2.9000e-004	0.0610	7.2100e-003	0.0682	0.0335	7.2100e-003	0.0407	0.0000	27.2365	27.2365	8.3500e-003	0.0000	27.4118

3.3 Site Preparation - 2017

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	1.0000e-004	7.6000e-004	1.4500e-003	0.0000	8.0000e-004	1.0000e-005	8.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.2052	0.2052	0.0000	0.0000	0.2052
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	5.4000e-004	5.2400e-003	1.0000e-005	0.0194	1.0000e-005	0.0194	2.1100e-003	1.0000e-005	2.1100e-003	0.0000	0.9173	0.9173	4.0000e-005	0.0000	0.9182
Total	5.1000e-004	1.3000e-003	6.6900e-003	1.0000e-005	0.0202	2.0000e-005	0.0202	2.2000e-003	2.0000e-005	2.2100e-003	0.0000	1.1224	1.1224	4.0000e-005	0.0000	1.1234

3.4 Grading - 2017

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					0.3501	0.0000	0.3501	0.1814	0.0000	0.1814	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3294	3.7580	2.5275	3.3300e-003		0.1791	0.1791		0.1648	0.1648	0.0000	309.2792	309.2792	0.0948	0.0000	311.2692
Total	0.3294	3.7580	2.5275	3.3300e-003	0.3501	0.1791	0.5292	0.1814	0.1648	0.3462	0.0000	309.2792	309.2792	0.0948	0.0000	311.2692

3.4 Grading - 2017

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	3.3000e-003	4.2800e-003	0.0419	1.0000e-004	0.1548	6.0000e-005	0.1549	0.0169	6.0000e-005	0.0169	0.0000	7.3380	7.3380	3.6000e-004	0.0000	7.3455
Total	3.3000e-003	4.2800e-003	0.0419	1.0000e-004	0.1548	6.0000e-005	0.1549	0.0169	6.0000e-005	0.0169	0.0000	7.3380	7.3380	3.6000e-004	0.0000	7.3455

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					0.1575	0.0000	0.1575	0.0817	0.0000	0.0817	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0817	1.6081	2.0489	3.3300e-003		0.0715	0.0715		0.0715	0.0715	0.0000	309.2788	309.2788	0.0948	0.0000	311.2688
Total	0.0817	1.6081	2.0489	3.3300e-003	0.1575	0.0715	0.2290	0.0817	0.0715	0.1531	0.0000	309.2788	309.2788	0.0948	0.0000	311.2688

3.4 Grading - 2017

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	3.3000e-003	4.2800e-003	0.0419	1.0000e-004	0.1548	6.0000e-005	0.1549	0.0169	6.0000e-005	0.0169	0.0000	7.3380	7.3380	3.6000e-004	0.0000	7.3455
Total	3.3000e-003	4.2800e-003	0.0419	1.0000e-004	0.1548	6.0000e-005	0.1549	0.0169	6.0000e-005	0.0169	0.0000	7.3380	7.3380	3.6000e-004	0.0000	7.3455

3.5 Utilities - 2017

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	0.0123	0.1134	0.0788	1.0000e-004		8.5200e-003	8.5200e-003		7.8400e-003	7.8400e-003	0.0000	9.4297	9.4297	2.8900e-003	0.0000	9.4903
Total	0.0123	0.1134	0.0788	1.0000e-004		8.5200e-003	8.5200e-003		7.8400e-003	7.8400e-003	0.0000	9.4297	9.4297	2.8900e-003	0.0000	9.4903

3.5 Utilities - 2017

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	5.7000e-004	5.5500e-003	1.0000e-005	0.0205	1.0000e-005	0.0205	2.2300e-003	1.0000e-005	2.2400e-003	0.0000	0.9716	0.9716	5.0000e-005	0.0000	0.9726
Total	4.4000e-004	5.7000e-004	5.5500e-003	1.0000e-005	0.0205	1.0000e-005	0.0205	2.2300e-003	1.0000e-005	2.2400e-003	0.0000	0.9716	0.9716	5.0000e-005	0.0000	0.9726

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	2.4900e-003	0.0568	0.0767	1.0000e-004		3.9800e-003	3.9800e-003		3.9800e-003	3.9800e-003	0.0000	9.4296	9.4296	2.8900e-003	0.0000	9.4903
Total	2.4900e-003	0.0568	0.0767	1.0000e-004		3.9800e-003	3.9800e-003		3.9800e-003	3.9800e-003	0.0000	9.4296	9.4296	2.8900e-003	0.0000	9.4903

3.5 Utilities - 2017

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	5.7000e-004	5.5500e-003	1.0000e-005	0.0205	1.0000e-005	0.0205	2.2300e-003	1.0000e-005	2.2400e-003	0.0000	0.9716	0.9716	5.0000e-005	0.0000	0.9726
Total	4.4000e-004	5.7000e-004	5.5500e-003	1.0000e-005	0.0205	1.0000e-005	0.0205	2.2300e-003	1.0000e-005	2.2400e-003	0.0000	0.9716	0.9716	5.0000e-005	0.0000	0.9726

3.6 Building Construction - 2017

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	0.2048	1.7428	1.1965	1.7700e-003		0.1176	0.1176		0.1104	0.1104	0.0000	158.0562	158.0562	0.0389	0.0000	158.8731
Total	0.2048	1.7428	1.1965	1.7700e-003		0.1176	0.1176		0.1104	0.1104	0.0000	158.0562	158.0562	0.0389	0.0000	158.8731

3.6 Building Construction - 2017

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	0.0298	0.3821	0.2787	1.2200e-003	0.5316	7.0000e-003	0.5386	0.0596	6.4400e-003	0.0661	0.0000	109.6938	109.6938	7.5000e-004	0.0000	109.7095
Worker	0.0242	0.0314	0.3075	7.5000e-004	1.1351	4.5000e-004	1.1355	0.1236	4.1000e-004	0.1241	0.0000	53.8118	53.8118	2.6300e-003	0.0000	53.8671
Total	0.0540	0.4135	0.5862	1.9700e-003	1.6667	7.4500e-003	1.6741	0.1833	6.8500e-003	0.1901	0.0000	163.5056	163.5056	3.3800e-003	0.0000	163.5766

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	0.0443	0.9355	1.1758	1.7700e-003		0.0595	0.0595		0.0595	0.0595	0.0000	158.0560	158.0560	0.0389	0.0000	158.8729
Total	0.0443	0.9355	1.1758	1.7700e-003		0.0595	0.0595		0.0595	0.0595	0.0000	158.0560	158.0560	0.0389	0.0000	158.8729

3.6 Building Construction - 2017

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	0.0298	0.3821	0.2787	1.2200e-003	0.5316	7.0000e-003	0.5386	0.0596	6.4400e-003	0.0661	0.0000	109.6938	109.6938	7.5000e-004	0.0000	109.7095
Worker	0.0242	0.0314	0.3075	7.5000e-004	1.1351	4.5000e-004	1.1355	0.1236	4.1000e-004	0.1241	0.0000	53.8118	53.8118	2.6300e-003	0.0000	53.8671
Total	0.0540	0.4135	0.5862	1.9700e-003	1.6667	7.4500e-003	1.6741	0.1833	6.8500e-003	0.1901	0.0000	163.5056	163.5056	3.3800e-003	0.0000	163.5766

3.6 Building Construction - 2018

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	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
Total	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723

3.6 Building Construction - 2018

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	0.0533	0.6705	0.5096	2.4100e-003	1.0511	0.0128	1.0638	0.1179	0.0117	0.1296	0.0000	213.0815	213.0815	1.4200e-003	0.0000	213.1114
Worker	0.0428	0.0558	0.5426	1.4700e-003	2.2444	8.6000e-004	2.2452	0.2445	8.0000e-004	0.2453	0.0000	102.4177	102.4177	4.7900e-003	0.0000	102.5183
Total	0.0961	0.7263	1.0522	3.8800e-003	3.2955	0.0136	3.3091	0.3623	0.0125	0.3749	0.0000	315.4991	315.4991	6.2100e-003	0.0000	315.6297

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	0.0876	1.8497	2.3249	3.5000e-003		0.1177	0.1177		0.1177	0.1177	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
Total	0.0876	1.8497	2.3249	3.5000e-003		0.1177	0.1177		0.1177	0.1177	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720

3.6 Building Construction - 2018

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	0.0533	0.6705	0.5096	2.4100e-003	1.0511	0.0128	1.0638	0.1179	0.0117	0.1296	0.0000	213.0815	213.0815	1.4200e-003	0.0000	213.1114
Worker	0.0428	0.0558	0.5426	1.4700e-003	2.2444	8.6000e-004	2.2452	0.2445	8.0000e-004	0.2453	0.0000	102.4177	102.4177	4.7900e-003	0.0000	102.5183
Total	0.0961	0.7263	1.0522	3.8800e-003	3.2955	0.0136	3.3091	0.3623	0.0125	0.3749	0.0000	315.4991	315.4991	6.2100e-003	0.0000	315.6297

3.6 Building Construction - 2019

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	0.1329	1.1845	0.9673	1.5100e-003		0.0726	0.0726		0.0683	0.0683	0.0000	132.2794	132.2794	0.0322	0.0000	132.9552
Total	0.1329	1.1845	0.9673	1.5100e-003		0.0726	0.0726		0.0683	0.0683	0.0000	132.2794	132.2794	0.0322	0.0000	132.9552

3.6 Building Construction - 2019

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	0.0214	0.2597	0.2072	1.0400e-003	0.4551	5.1000e-003	0.4602	0.0510	4.6900e-003	0.0557	0.0000	90.6716	90.6716	5.9000e-004	0.0000	90.6841
Worker	0.0169	0.0220	0.2129	6.4000e-004	0.9717	3.7000e-004	0.9721	0.1058	3.4000e-004	0.1062	0.0000	42.5957	42.5957	1.9200e-003	0.0000	42.6360
Total	0.0383	0.2817	0.4201	1.6800e-003	1.4268	5.4700e-003	1.4322	0.1569	5.0300e-003	0.1619	0.0000	133.2673	133.2673	2.5100e-003	0.0000	133.3201

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	0.0379	0.8008	1.0066	1.5100e-003		0.0509	0.0509		0.0509	0.0509	0.0000	132.2792	132.2792	0.0322	0.0000	132.9551
Total	0.0379	0.8008	1.0066	1.5100e-003		0.0509	0.0509		0.0509	0.0509	0.0000	132.2792	132.2792	0.0322	0.0000	132.9551

3.6 Building Construction - 2019

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	0.0214	0.2597	0.2072	1.0400e-003	0.4551	5.1000e-003	0.4602	0.0510	4.6900e-003	0.0557	0.0000	90.6716	90.6716	5.9000e-004	0.0000	90.6841
Worker	0.0169	0.0220	0.2129	6.4000e-004	0.9717	3.7000e-004	0.9721	0.1058	3.4000e-004	0.1062	0.0000	42.5957	42.5957	1.9200e-003	0.0000	42.6360
Total	0.0383	0.2817	0.4201	1.6800e-003	1.4268	5.4700e-003	1.4322	0.1569	5.0300e-003	0.1619	0.0000	133.2673	133.2673	2.5100e-003	0.0000	133.3201

3.7 Parking Lot Paving - 2019

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	4.9900e-003	0.0523	0.0503	8.0000e-005		2.8300e-003	2.8300e-003		2.6100e-003	2.6100e-003	0.0000	7.0138	7.0138	2.2200e-003	0.0000	7.0604
Paving	3.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.9200e-003	0.0523	0.0503	8.0000e-005		2.8300e-003	2.8300e-003		2.6100e-003	2.6100e-003	0.0000	7.0138	7.0138	2.2200e-003	0.0000	7.0604

3.7 Parking Lot Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.7000e-004	1.6500e-003	0.0000	7.5200e-003	0.0000	7.5300e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.3298	0.3298	1.0000e-005	0.0000	0.3302
Total	1.3000e-004	1.7000e-004	1.6500e-003	0.0000	7.5200e-003	0.0000	7.5300e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.3298	0.3298	1.0000e-005	0.0000	0.3302

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	1.9200e-003	0.0387	0.0593	8.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	7.0138	7.0138	2.2200e-003	0.0000	7.0604
Paving	3.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.8500e-003	0.0387	0.0593	8.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	7.0138	7.0138	2.2200e-003	0.0000	7.0604

3.7 Parking Lot Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.7000e-004	1.6500e-003	0.0000	7.5200e-003	0.0000	7.5300e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.3298	0.3298	1.0000e-005	0.0000	0.3302
Total	1.3000e-004	1.7000e-004	1.6500e-003	0.0000	7.5200e-003	0.0000	7.5300e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.3298	0.3298	1.0000e-005	0.0000	0.3302

3.8 Architectural Coating - 2019

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	3.4828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2789
Total	3.4841	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2789

3.8 Architectural Coating - 2019

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	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	0.0000
Worker	1.4900e-003	1.9500e-003	0.0188	6.0000e-005	0.0860	3.0000e-005	0.0860	9.3700e-003	3.0000e-005	9.4000e-003	0.0000	3.7695	3.7695	1.7000e-004	0.0000	3.7731	
Total	1.4900e-003	1.9500e-003	0.0188	6.0000e-005	0.0860	3.0000e-005	0.0860	9.3700e-003	3.0000e-005	9.4000e-003	0.0000	3.7695	3.7695	1.7000e-004	0.0000	3.7731	

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	3.4828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	6.7800e-003	9.1600e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2789
Total	3.4831	6.7800e-003	9.1600e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2789

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.480588	0.067655	0.152308	0.148424	0.059174	0.006668	0.036554	0.035496	0.000914	0.001885	0.007619	0.000654	0.002062

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	97.7999	97.7999	0.0164	3.4100e-003	99.2006
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	97.7999	97.7999	0.0164	3.4100e-003	99.2006
NaturalGas Mitigated	0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	480.2316	480.2316	9.2000e-003	8.8000e-003	483.1542
NaturalGas Unmitigated	0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	480.2316	480.2316	9.2000e-003	8.8000e-003	483.1542

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					
Apartments Mid Rise	3.97482e+006	0.0214	0.1832	0.0779	1.1700e-003		0.0148	0.0148		0.0148	0.0148	0.0000	212.1115	212.1115	4.0700e-003	3.8900e-003	213.4024
City Park	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
Enclosed Parking Structure	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
General Office Building	2.48e+006	0.0134	0.1216	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.3422	132.3422	2.5400e-003	2.4300e-003	133.1477
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
Recreational Swimming Pool	64380	3.5000e-004	3.1600e-003	2.6500e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.4356	3.4356	7.0000e-005	6.0000e-005	3.4565
Research & Development	2.48e+006	0.0134	0.1216	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.3422	132.3422	2.5400e-003	2.4300e-003	133.1477
Unenclosed Parking with Elevator	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
Total		0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	480.2316	480.2316	9.2200e-003	8.8100e-003	483.1542

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						
City Park	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	0.0000
Enclosed Parking Structure	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	0.0000
General Office Building	2.48e+006	0.0134	0.1216	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.3422	132.3422	2.5400e-003	2.4300e-003	133.1477	
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	0.0000
Recreational Swimming Pool	64380	3.5000e-004	3.1600e-003	2.6500e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.4356	3.4356	7.0000e-005	6.0000e-005	3.4565	
Research & Development	2.48e+006	0.0134	0.1216	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.3422	132.3422	2.5400e-003	2.4300e-003	133.1477	
Unenclosed Parking with Elevator	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	0.0000
Apartments Mid Rise	3.97482e+006	0.0214	0.1832	0.0779	1.1700e-003		0.0148	0.0148		0.0148	0.0148	0.0000	212.1115	212.1115	4.0700e-003	3.8900e-003	213.4024	
Total		0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	480.2316	480.2316	9.2200e-003	8.8100e-003	483.1542	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	550200	35.7928	5.9900e-003	1.2500e-003	36.3054
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	953160	62.0071	0.0104	2.1600e-003	62.8951
Total		97.7999	0.0164	3.4100e-003	99.2006

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	550200	35.7928	5.9900e-003	1.2500e-003	36.3054
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	953160	62.0071	0.0104	2.1600e-003	62.8951
Total		97.7999	0.0164	3.4100e-003	99.2006

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

No Hearths Installed

	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	8.7108	0.0269	2.3277	1.2000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	3.7879	3.7879	3.7700e-003	0.0000	3.8670
Unmitigated	8.7196	0.0269	2.3282	1.2000e-004		0.0188	0.0188		0.0188	0.0188	0.0000	91.2170	91.2170	5.4400e-003	1.6000e-003	91.8282

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	1.2502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3884					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	8.8300e-003	0.0000	4.8000e-004	0.0000		6.1000e-003	6.1000e-003		6.0400e-003	6.0400e-003	0.0000	87.4291	87.4291	1.6800e-003	1.6000e-003	87.9612
Landscaping	0.0722	0.0269	2.3277	1.2000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	3.7879	3.7879	3.7700e-003	0.0000	3.8670
Total	8.7196	0.0269	2.3282	1.2000e-004		0.0188	0.0188		0.0188	0.0188	0.0000	91.2170	91.2170	5.4500e-003	1.6000e-003	91.8282

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	1.2502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3884					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0722	0.0269	2.3277	1.2000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	3.7879	3.7879	3.7700e-003	0.0000	3.8670
Total	8.7108	0.0269	2.3277	1.2000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	3.7879	3.7879	3.7700e-003	0.0000	3.8670

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Reclaimed Water

Use Grey Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.2078	0.0304	0.0186	23.5988
Unmitigated	17.9856	0.0305	0.0186	24.3878

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.6652 / 0	12.4683	0.0226	0.0138	17.2225
City Park	0 / 4.9494	1.1269	1.9000e-004	4.0000e-005	1.1431
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.23282 / 0	3.6934	6.6800e-003	4.0900e-003	5.1017
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.824455 / 0.505311	0.6970	1.0700e-003	6.5000e-004	0.9205
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.9856	0.0305	0.0186	24.3878

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.6652 / 0	11.8891	0.0225	0.0138	16.6350
City Park	0 / 4.9494	1.1269	1.9000e-004	4.0000e-005	1.1431
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.23282 / 0	3.5218	6.6500e-003	4.0800e-003	4.9277
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.824455 / 0.505311	0.6699	1.0700e-003	6.5000e-004	0.8931
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.2078	0.0304	0.0186	23.5988

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	61.6605	3.6440	0.0000	138.1852
Unmitigated	61.6605	3.6440	0.0000	138.1852

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	142.14	28.8531	1.7052	0.0000	64.6617
City Park	1.68	0.3410	0.0202	0.0000	0.7643
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	74.4	15.1025	0.8925	0.0000	33.8457
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	79.46	16.1297	0.9532	0.0000	36.1476
Research & Development	6.08	1.2342	0.0729	0.0000	2.7659
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		61.6605	3.6440	0.0000	138.1852

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	142.14	28.8531	1.7052	0.0000	64.6617
City Park	1.68	0.3410	0.0202	0.0000	0.7643
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	74.4	15.1025	0.8925	0.0000	33.8457
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	79.46	16.1297	0.9532	0.0000	36.1476
Research & Development	6.08	1.2342	0.0729	0.0000	2.7659
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		61.6605	3.6440	0.0000	138.1852

9.0 Operational Offroad

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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-208.0910	0.0000	0.0000	-208.0910

10.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	46.9 / 0	-290.7800	0.0000	0.0000	-290.7800
Grassland	0 / 15.9	68.5290	0.0000	0.0000	68.5290
Wetlands	0 / 4	0.0000	0.0000	0.0000	0.0000
Total		-222.2510	0.0000	0.0000	-222.2510

10.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	20	14.1600	0.0000	0.0000	14.1600
Total		14.1600	0.0000	0.0000	14.1600

Nishi Development Project - Phase 1 (Mitigated)
Yolo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	80.00	1000sqft	1.20	80,000.00	0
Research & Development	80.00	1000sqft	1.20	80,000.00	0
Enclosed Parking Structure	210.00	Space	0.00	84,000.00	0
Parking Lot	328.00	Space	3.00	131,200.00	0
Unenclosed Parking with Elevator	845.00	Space	0.00	338,000.00	0
City Park	19.90	Acre	19.90	866,844.00	0
Recreational Swimming Pool	1.74	1000sqft	0.00	1,740.00	0
Apartments Mid Rise	310.00	Dwelling Unit	4.70	310,000.00	887

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	2			Operational Year	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	143.42	CH4 Intensity (lb/MW hr)	0.024	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assumes 33% renewable portfolio standard is achieved by 2019.

Land Use - Assume 12.5% of an average Olympic Size Pool (82,500/660,000 gal). Average Olympic pool has a surface area of 13,940sqft. Zeroed lot acreage are included in the footprint of commercial or res land uses.

Construction Phase - Demo: 1 week, Site Prep: 3 weeks, Grading: 5 months, Utilities:22 days, Building Construction: 24 months, Parking lot paving: 7 days, Architectural Coating: 0.5 months

Off-road Equipment - Assumed equipment use for installation of utilities.

Trips and VMT - Local landfill is approximately 10 miles away. Building material will likely come from Sacramento, average 30 miles away. Site is relatively flat - no grading hauling expected.

On-road Fugitive Dust - Majority of travel will be on paved roads

Demolition - Demolition of Redrum Burger (978 Olive Dr.) and Third Space Art Collective (946 Olive Dr.)

Grading - Total land use acres = total acres disturbed. Assume removed 46.9 acres of winter wheat removed at 2.5 tons per acre.

Architectural Coating - Arch Coating sqft corrected using Section 4.7 in Appendix A and Section 7 in Appendix E of the CalEEMod User's Guide

Vehicle Trips - Use offmodel calculations for mobile operational emissions

Woodstoves - Assume only for sale units have fireplaces. All fireplaces are gas.

Area Coating -

Energy Use - DEG calculated energy use and off-model energy emission calculations. Input DEG Natural Gas assumptions. Electricity emissions are calculated off-model.

Water And Wastewater - All water usage, except pool, from Cunningham Engineering. Assume pool will have default water usage. R&D water use is lumped under general office building. Davis' Water Pollution Control plan is 100% aerobic.

Sequestration - Assumption

Construction Off-road Equipment Mitigation - Mitigation needed for possible exceedance of NOx threshold.

Area Mitigation - Mitigation needed to reduce ROG emissions to below thresholds

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	727,260.00	112,086.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,181,780.00	240,000.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	209,250.00	243,675.00
tblArchitecturalCoating	ConstArea_Residential_Interior	627,750.00	731,025.00

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	35.00	10.00
tblConstructionPhase	NumDays	440.00	506.00
tblConstructionPhase	NumDays	30.00	5.00
tblConstructionPhase	NumDays	45.00	108.00
tblConstructionPhase	NumDays	35.00	7.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	PhaseEndDate	7/1/2019	6/28/2019
tblConstructionPhase	PhaseEndDate	6/10/2019	6/6/2019
tblConstructionPhase	PhaseEndDate	1/6/2017	1/7/2017
tblConstructionPhase	PhaseEndDate	7/28/2017	6/30/2017
tblConstructionPhase	PhaseStartDate	6/18/2019	6/15/2019
tblConstructionPhase	PhaseStartDate	7/1/2017	6/29/2017
tblConstructionPhase	PhaseStartDate	6/29/2017	6/1/2017
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.62	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	2,554.47	0.00
tblEnergyUse	NT24E	3.62	0.00
tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24NG	1,716.22	0.00

tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	641.35	143.42
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2019
tblRoadDust	RoadPercentPave	94	100
tblSequestration	NumberOfNewTrees	0.00	20.00
tblSolidWaste	SolidWasteGenerationRate	142.60	142.14
tblSolidWaste	SolidWasteGenerationRate	1.71	1.68
tblSolidWaste	SolidWasteGenerationRate	9.92	79.46
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00

tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripNumber	292.00	20.00
tblTripsAndVMT	WorkerTripNumber	872.00	120.00
tblTripsAndVMT	WorkerTripNumber	174.00	120.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	8.11	0.00

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	20,197,747.94	17,665,221.00
tblWater	IndoorWaterUseRate	14,218,699.84	5,232,820.00
tblWater	IndoorWaterUseRate	102,909.07	824,455.43
tblWater	IndoorWaterUseRate	39,335,515.78	0.00
tblWater	OutdoorWaterUseRate	12,733,362.83	0.00
tblWater	OutdoorWaterUseRate	23,710,478.86	4,949,400.00
tblWater	OutdoorWaterUseRate	8,714,687.00	0.00
tblWater	OutdoorWaterUseRate	63,073.30	505,311.39
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	15.50	15.45
tblWoodstoves	NumberNoncatalytic	15.50	15.45
tblWoodstoves	WoodstoveWoodMass	4,558.40	0.00

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					
2017	0.6516	6.5320	4.8309	7.7000e-003	2.3628	0.3388	2.7015	0.4624	0.3140	0.7764	0.0000	687.2035	687.2035	0.1513	0.0000	690.3800
2018	0.4443	3.7619	3.3402	7.3800e-003	3.2955	0.2086	3.5041	0.3623	0.1959	0.5582	0.0000	624.4836	624.4836	0.0818	0.0000	626.2020
2019	3.6658	1.5298	1.4674	3.3400e-003	1.5203	0.0816	1.6019	0.1671	0.0766	0.2436	0.0000	277.9365	277.9365	0.0372	0.0000	278.7179
Total	4.7618	11.8236	9.6384	0.0184	7.1785	0.6290	7.8075	0.9918	0.5864	1.5782	0.0000	1,589.6235	1,589.6235	0.2703	0.0000	1,595.2999

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					
2017	0.1968	3.2162	4.1881	7.7000e-003	2.0922	0.1519	2.2441	0.3211	0.1513	0.4724	0.0000	687.2029	687.2029	0.1513	0.0000	690.3794
2018	0.1837	2.5760	3.3771	7.3800e-003	3.2955	0.1313	3.4267	0.3623	0.1302	0.4925	0.0000	624.4832	624.4832	0.0818	0.0000	626.2016
2019	3.5668	1.1302	1.5156	3.3400e-003	1.5203	0.0590	1.5793	0.1671	0.0586	0.2256	0.0000	277.9363	277.9363	0.0372	0.0000	278.7177
Total	3.9472	6.9224	9.0807	0.0184	6.9080	0.3422	7.2502	0.8505	0.3401	1.1906	0.0000	1,589.6224	1,589.6224	0.2703	0.0000	1,595.2987

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	17.11	41.45	5.79	0.00	3.77	45.59	7.14	14.25	42.01	24.56	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	tons/yr										MT/yr					
Area	8.7196	0.0269	2.3282	1.2000e-004		0.0188	0.0188		0.0188	0.0188	0.0000	91.2170	91.2170	5.4400e-003	1.6000e-003	91.8282
Energy	0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	578.0315	578.0315	0.0256	0.0122	582.3548
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	61.6605	0.0000	61.6605	3.6440	0.0000	138.1852
Water						0.0000	0.0000		0.0000	0.0000	8.3931	9.5925	17.9856	0.0305	0.0186	24.3878
Total	8.7682	0.4564	2.6130	2.7700e-003	0.0000	0.0524	0.0524	0.0000	0.0523	0.0523	70.0536	678.8410	748.8946	3.7055	0.0324	836.7559

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	8.1413	0.0241	2.0460	1.0000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	3.2170	3.2170	2.8600e-003	0.0000		3.2770
Energy	0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	578.0315	578.0315	0.0256	0.0122		582.3548
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Waste						0.0000	0.0000		0.0000	0.0000	61.6605	0.0000	61.6605	3.6440	0.0000		138.1852
Water						0.0000	0.0000		0.0000	0.0000	8.3931	8.8147	17.2078	0.0304	0.0186		23.5988
Total	8.1898	0.4535	2.3308	2.7500e-003	0.0000	0.0446	0.0446	0.0000	0.0446	0.0446	70.0536	590.0632	660.1168	3.7028	0.0308		747.4158

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.60	0.63	10.80	0.72	0.00	14.80	14.80	0.00	14.70	14.70	0.00	13.08	11.85	0.07	5.03	10.68

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	14.1600
Vegetation Land Change	-262.7650
Total	-248.6050

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/7/2017	5	5	
2	Site Preparation	Site Preparation	1/8/2017	1/27/2017	5	15	
3	Grading	Grading	1/28/2017	6/28/2017	5	108	
4	Utilities	Trenching	6/1/2017	6/30/2017	5	22	
5	Building Construction	Building Construction	6/29/2017	6/6/2019	5	506	
6	Parking Lot Paving	Paving	6/7/2019	6/17/2019	5	7	
7	Architectural Coating	Architectural Coating	6/15/2019	6/28/2019	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 46.9

Acres of Paving: 0

Residential Indoor: 731,025; Residential Outdoor: 243,675; Non-Residential Indoor: 240,000; Non-Residential Outdoor: 112,086 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Utilities	Aerial Lifts	1	3.00	62	0.31
Utilities	Forklifts	1	3.00	89	0.20
Utilities	Rollers	1	7.00	80	0.38
Utilities	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Utilities	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	7.00	226	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
Parking Lot Paving	Pavers	2	8.00	125	0.42
Parking Lot Paving	Paving Equipment	2	8.00	130	0.36
Parking Lot 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
Demolition	6	15.00	0.00	50.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	12.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Utilities	5	13.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	120.00	20.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Parking Lot Paving	6	15.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	120.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2017

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					6.3600e-003	0.0000	6.3600e-003	9.6000e-004	0.0000	9.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.1067	0.0847	1.0000e-004		5.3100e-003	5.3100e-003		4.9500e-003	4.9500e-003	0.0000	9.1546	9.1546	2.5100e-003	0.0000	9.2073
Total	0.0101	0.1067	0.0847	1.0000e-004	6.3600e-003	5.3100e-003	0.0117	9.6000e-004	4.9500e-003	5.9100e-003	0.0000	9.1546	9.1546	2.5100e-003	0.0000	9.2073

3.2 Demolition - 2017

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	4.3000e-004	3.1500e-003	6.0500e-003	1.0000e-005	3.3500e-003	4.0000e-005	3.3900e-003	3.7000e-004	4.0000e-005	4.1000e-004	0.0000	0.8550	0.8550	1.0000e-005	0.0000	0.8551
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.4600e-003	0.0000	5.3700e-003	0.0000	5.3800e-003	5.9000e-004	0.0000	5.9000e-004	0.0000	0.2548	0.2548	1.0000e-005	0.0000	0.2551
Total	5.4000e-004	3.3000e-003	7.5100e-003	1.0000e-005	8.7200e-003	4.0000e-005	8.7700e-003	9.6000e-004	4.0000e-005	1.0000e-003	0.0000	1.1097	1.1097	2.0000e-005	0.0000	1.1101

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					2.8600e-003	0.0000	2.8600e-003	4.3000e-004	0.0000	4.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3700e-003	0.0469	0.0632	1.0000e-004		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003	0.0000	9.1545	9.1545	2.5100e-003	0.0000	9.2073
Total	2.3700e-003	0.0469	0.0632	1.0000e-004	2.8600e-003	2.2000e-003	5.0600e-003	4.3000e-004	2.2000e-003	2.6300e-003	0.0000	9.1545	9.1545	2.5100e-003	0.0000	9.2073

3.2 Demolition - 2017

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	4.3000e-004	3.1500e-003	6.0500e-003	1.0000e-005	3.3500e-003	4.0000e-005	3.3900e-003	3.7000e-004	4.0000e-005	4.1000e-004	0.0000	0.8550	0.8550	1.0000e-005	0.0000	0.8551
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.4600e-003	0.0000	5.3700e-003	0.0000	5.3800e-003	5.9000e-004	0.0000	5.9000e-004	0.0000	0.2548	0.2548	1.0000e-005	0.0000	0.2551
Total	5.4000e-004	3.3000e-003	7.5100e-003	1.0000e-005	8.7200e-003	4.0000e-005	8.7700e-003	9.6000e-004	4.0000e-005	1.0000e-003	0.0000	1.1097	1.1097	2.0000e-005	0.0000	1.1101

3.3 Site Preparation - 2017

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					0.1355	0.0000	0.1355	0.0745	0.0000	0.0745	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0363	0.3882	0.2955	2.9000e-004		0.0207	0.0207		0.0190	0.0190	0.0000	27.2365	27.2365	8.3500e-003	0.0000	27.4118
Total	0.0363	0.3882	0.2955	2.9000e-004	0.1355	0.0207	0.1562	0.0745	0.0190	0.0935	0.0000	27.2365	27.2365	8.3500e-003	0.0000	27.4118

3.3 Site Preparation - 2017

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	1.0000e-004	7.6000e-004	1.4500e-003	0.0000	8.0000e-004	1.0000e-005	8.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.2052	0.2052	0.0000	0.0000	0.2052
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	5.4000e-004	5.2400e-003	1.0000e-005	0.0194	1.0000e-005	0.0194	2.1100e-003	1.0000e-005	2.1100e-003	0.0000	0.9173	0.9173	4.0000e-005	0.0000	0.9182
Total	5.1000e-004	1.3000e-003	6.6900e-003	1.0000e-005	0.0202	2.0000e-005	0.0202	2.2000e-003	2.0000e-005	2.2100e-003	0.0000	1.1224	1.1224	4.0000e-005	0.0000	1.1234

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					0.0610	0.0000	0.0610	0.0335	0.0000	0.0335	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1400e-003	0.1459	0.1755	2.9000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	27.2365	27.2365	8.3500e-003	0.0000	27.4118
Total	7.1400e-003	0.1459	0.1755	2.9000e-004	0.0610	7.2100e-003	0.0682	0.0335	7.2100e-003	0.0407	0.0000	27.2365	27.2365	8.3500e-003	0.0000	27.4118

3.3 Site Preparation - 2017

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	1.0000e-004	7.6000e-004	1.4500e-003	0.0000	8.0000e-004	1.0000e-005	8.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	0.2052	0.2052	0.0000	0.0000	0.2052
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	5.4000e-004	5.2400e-003	1.0000e-005	0.0194	1.0000e-005	0.0194	2.1100e-003	1.0000e-005	2.1100e-003	0.0000	0.9173	0.9173	4.0000e-005	0.0000	0.9182
Total	5.1000e-004	1.3000e-003	6.6900e-003	1.0000e-005	0.0202	2.0000e-005	0.0202	2.2000e-003	2.0000e-005	2.2100e-003	0.0000	1.1224	1.1224	4.0000e-005	0.0000	1.1234

3.4 Grading - 2017

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					0.3501	0.0000	0.3501	0.1814	0.0000	0.1814	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3294	3.7580	2.5275	3.3300e-003		0.1791	0.1791		0.1648	0.1648	0.0000	309.2792	309.2792	0.0948	0.0000	311.2692
Total	0.3294	3.7580	2.5275	3.3300e-003	0.3501	0.1791	0.5292	0.1814	0.1648	0.3462	0.0000	309.2792	309.2792	0.0948	0.0000	311.2692

3.4 Grading - 2017

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	3.3000e-003	4.2800e-003	0.0419	1.0000e-004	0.1548	6.0000e-005	0.1549	0.0169	6.0000e-005	0.0169	0.0000	7.3380	7.3380	3.6000e-004	0.0000	7.3455
Total	3.3000e-003	4.2800e-003	0.0419	1.0000e-004	0.1548	6.0000e-005	0.1549	0.0169	6.0000e-005	0.0169	0.0000	7.3380	7.3380	3.6000e-004	0.0000	7.3455

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					0.1575	0.0000	0.1575	0.0817	0.0000	0.0817	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0817	1.6081	2.0489	3.3300e-003		0.0715	0.0715		0.0715	0.0715	0.0000	309.2788	309.2788	0.0948	0.0000	311.2688
Total	0.0817	1.6081	2.0489	3.3300e-003	0.1575	0.0715	0.2290	0.0817	0.0715	0.1531	0.0000	309.2788	309.2788	0.0948	0.0000	311.2688

3.4 Grading - 2017

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	3.3000e-003	4.2800e-003	0.0419	1.0000e-004	0.1548	6.0000e-005	0.1549	0.0169	6.0000e-005	0.0169	0.0000	7.3380	7.3380	3.6000e-004	0.0000	7.3455
Total	3.3000e-003	4.2800e-003	0.0419	1.0000e-004	0.1548	6.0000e-005	0.1549	0.0169	6.0000e-005	0.0169	0.0000	7.3380	7.3380	3.6000e-004	0.0000	7.3455

3.5 Utilities - 2017

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	0.0123	0.1134	0.0788	1.0000e-004		8.5200e-003	8.5200e-003		7.8400e-003	7.8400e-003	0.0000	9.4297	9.4297	2.8900e-003	0.0000	9.4903
Total	0.0123	0.1134	0.0788	1.0000e-004		8.5200e-003	8.5200e-003		7.8400e-003	7.8400e-003	0.0000	9.4297	9.4297	2.8900e-003	0.0000	9.4903

3.5 Utilities - 2017

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	5.7000e-004	5.5500e-003	1.0000e-005	0.0205	1.0000e-005	0.0205	2.2300e-003	1.0000e-005	2.2400e-003	0.0000	0.9716	0.9716	5.0000e-005	0.0000	0.9726
Total	4.4000e-004	5.7000e-004	5.5500e-003	1.0000e-005	0.0205	1.0000e-005	0.0205	2.2300e-003	1.0000e-005	2.2400e-003	0.0000	0.9716	0.9716	5.0000e-005	0.0000	0.9726

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	2.4900e-003	0.0568	0.0767	1.0000e-004		3.9800e-003	3.9800e-003		3.9800e-003	3.9800e-003	0.0000	9.4296	9.4296	2.8900e-003	0.0000	9.4903
Total	2.4900e-003	0.0568	0.0767	1.0000e-004		3.9800e-003	3.9800e-003		3.9800e-003	3.9800e-003	0.0000	9.4296	9.4296	2.8900e-003	0.0000	9.4903

3.5 Utilities - 2017

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	5.7000e-004	5.5500e-003	1.0000e-005	0.0205	1.0000e-005	0.0205	2.2300e-003	1.0000e-005	2.2400e-003	0.0000	0.9716	0.9716	5.0000e-005	0.0000	0.9726
Total	4.4000e-004	5.7000e-004	5.5500e-003	1.0000e-005	0.0205	1.0000e-005	0.0205	2.2300e-003	1.0000e-005	2.2400e-003	0.0000	0.9716	0.9716	5.0000e-005	0.0000	0.9726

3.6 Building Construction - 2017

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	0.2048	1.7428	1.1965	1.7700e-003		0.1176	0.1176		0.1104	0.1104	0.0000	158.0562	158.0562	0.0389	0.0000	158.8731
Total	0.2048	1.7428	1.1965	1.7700e-003		0.1176	0.1176		0.1104	0.1104	0.0000	158.0562	158.0562	0.0389	0.0000	158.8731

3.6 Building Construction - 2017

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	0.0298	0.3821	0.2787	1.2200e-003	0.5316	7.0000e-003	0.5386	0.0596	6.4400e-003	0.0661	0.0000	109.6938	109.6938	7.5000e-004	0.0000	109.7095
Worker	0.0242	0.0314	0.3075	7.5000e-004	1.1351	4.5000e-004	1.1355	0.1236	4.1000e-004	0.1241	0.0000	53.8118	53.8118	2.6300e-003	0.0000	53.8671
Total	0.0540	0.4135	0.5862	1.9700e-003	1.6667	7.4500e-003	1.6741	0.1833	6.8500e-003	0.1901	0.0000	163.5056	163.5056	3.3800e-003	0.0000	163.5766

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	0.0443	0.9355	1.1758	1.7700e-003		0.0595	0.0595		0.0595	0.0595	0.0000	158.0560	158.0560	0.0389	0.0000	158.8729
Total	0.0443	0.9355	1.1758	1.7700e-003		0.0595	0.0595		0.0595	0.0595	0.0000	158.0560	158.0560	0.0389	0.0000	158.8729

3.6 Building Construction - 2017

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	0.0298	0.3821	0.2787	1.2200e-003	0.5316	7.0000e-003	0.5386	0.0596	6.4400e-003	0.0661	0.0000	109.6938	109.6938	7.5000e-004	0.0000	109.7095
Worker	0.0242	0.0314	0.3075	7.5000e-004	1.1351	4.5000e-004	1.1355	0.1236	4.1000e-004	0.1241	0.0000	53.8118	53.8118	2.6300e-003	0.0000	53.8671
Total	0.0540	0.4135	0.5862	1.9700e-003	1.6667	7.4500e-003	1.6741	0.1833	6.8500e-003	0.1901	0.0000	163.5056	163.5056	3.3800e-003	0.0000	163.5766

3.6 Building Construction - 2018

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	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
Total	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723

3.6 Building Construction - 2018

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	0.0533	0.6705	0.5096	2.4100e-003	1.0511	0.0128	1.0638	0.1179	0.0117	0.1296	0.0000	213.0815	213.0815	1.4200e-003	0.0000	213.1114
Worker	0.0428	0.0558	0.5426	1.4700e-003	2.2444	8.6000e-004	2.2452	0.2445	8.0000e-004	0.2453	0.0000	102.4177	102.4177	4.7900e-003	0.0000	102.5183
Total	0.0961	0.7263	1.0522	3.8800e-003	3.2955	0.0136	3.3091	0.3623	0.0125	0.3749	0.0000	315.4991	315.4991	6.2100e-003	0.0000	315.6297

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	0.0876	1.8497	2.3249	3.5000e-003		0.1177	0.1177		0.1177	0.1177	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
Total	0.0876	1.8497	2.3249	3.5000e-003		0.1177	0.1177		0.1177	0.1177	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720

3.6 Building Construction - 2018

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	0.0533	0.6705	0.5096	2.4100e-003	1.0511	0.0128	1.0638	0.1179	0.0117	0.1296	0.0000	213.0815	213.0815	1.4200e-003	0.0000	213.1114
Worker	0.0428	0.0558	0.5426	1.4700e-003	2.2444	8.6000e-004	2.2452	0.2445	8.0000e-004	0.2453	0.0000	102.4177	102.4177	4.7900e-003	0.0000	102.5183
Total	0.0961	0.7263	1.0522	3.8800e-003	3.2955	0.0136	3.3091	0.3623	0.0125	0.3749	0.0000	315.4991	315.4991	6.2100e-003	0.0000	315.6297

3.6 Building Construction - 2019

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	0.1329	1.1845	0.9673	1.5100e-003		0.0726	0.0726		0.0683	0.0683	0.0000	132.2794	132.2794	0.0322	0.0000	132.9552
Total	0.1329	1.1845	0.9673	1.5100e-003		0.0726	0.0726		0.0683	0.0683	0.0000	132.2794	132.2794	0.0322	0.0000	132.9552

3.6 Building Construction - 2019

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	0.0214	0.2597	0.2072	1.0400e-003	0.4551	5.1000e-003	0.4602	0.0510	4.6900e-003	0.0557	0.0000	90.6716	90.6716	5.9000e-004	0.0000	90.6841
Worker	0.0169	0.0220	0.2129	6.4000e-004	0.9717	3.7000e-004	0.9721	0.1058	3.4000e-004	0.1062	0.0000	42.5957	42.5957	1.9200e-003	0.0000	42.6360
Total	0.0383	0.2817	0.4201	1.6800e-003	1.4268	5.4700e-003	1.4322	0.1569	5.0300e-003	0.1619	0.0000	133.2673	133.2673	2.5100e-003	0.0000	133.3201

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	0.0379	0.8008	1.0066	1.5100e-003		0.0509	0.0509		0.0509	0.0509	0.0000	132.2792	132.2792	0.0322	0.0000	132.9551
Total	0.0379	0.8008	1.0066	1.5100e-003		0.0509	0.0509		0.0509	0.0509	0.0000	132.2792	132.2792	0.0322	0.0000	132.9551

3.6 Building Construction - 2019

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	0.0214	0.2597	0.2072	1.0400e-003	0.4551	5.1000e-003	0.4602	0.0510	4.6900e-003	0.0557	0.0000	90.6716	90.6716	5.9000e-004	0.0000	90.6841
Worker	0.0169	0.0220	0.2129	6.4000e-004	0.9717	3.7000e-004	0.9721	0.1058	3.4000e-004	0.1062	0.0000	42.5957	42.5957	1.9200e-003	0.0000	42.6360
Total	0.0383	0.2817	0.4201	1.6800e-003	1.4268	5.4700e-003	1.4322	0.1569	5.0300e-003	0.1619	0.0000	133.2673	133.2673	2.5100e-003	0.0000	133.3201

3.7 Parking Lot Paving - 2019

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	4.9900e-003	0.0523	0.0503	8.0000e-005		2.8300e-003	2.8300e-003		2.6100e-003	2.6100e-003	0.0000	7.0138	7.0138	2.2200e-003	0.0000	7.0604
Paving	3.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.9200e-003	0.0523	0.0503	8.0000e-005		2.8300e-003	2.8300e-003		2.6100e-003	2.6100e-003	0.0000	7.0138	7.0138	2.2200e-003	0.0000	7.0604

3.7 Parking Lot Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.7000e-004	1.6500e-003	0.0000	7.5200e-003	0.0000	7.5300e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.3298	0.3298	1.0000e-005	0.0000	0.3302
Total	1.3000e-004	1.7000e-004	1.6500e-003	0.0000	7.5200e-003	0.0000	7.5300e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.3298	0.3298	1.0000e-005	0.0000	0.3302

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	1.9200e-003	0.0387	0.0593	8.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	7.0138	7.0138	2.2200e-003	0.0000	7.0604
Paving	3.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.8500e-003	0.0387	0.0593	8.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	7.0138	7.0138	2.2200e-003	0.0000	7.0604

3.7 Parking Lot Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.7000e-004	1.6500e-003	0.0000	7.5200e-003	0.0000	7.5300e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.3298	0.3298	1.0000e-005	0.0000	0.3302
Total	1.3000e-004	1.7000e-004	1.6500e-003	0.0000	7.5200e-003	0.0000	7.5300e-003	8.2000e-004	0.0000	8.2000e-004	0.0000	0.3298	0.3298	1.0000e-005	0.0000	0.3302

3.8 Architectural Coating - 2019

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	3.4828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2789
Total	3.4841	9.1800e-003	9.2100e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2789

3.8 Architectural Coating - 2019

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	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	0.0000
Worker	1.4900e-003	1.9500e-003	0.0188	6.0000e-005	0.0860	3.0000e-005	0.0860	9.3700e-003	3.0000e-005	9.4000e-003	0.0000	3.7695	3.7695	1.7000e-004	0.0000	3.7731	
Total	1.4900e-003	1.9500e-003	0.0188	6.0000e-005	0.0860	3.0000e-005	0.0860	9.3700e-003	3.0000e-005	9.4000e-003	0.0000	3.7695	3.7695	1.7000e-004	0.0000	3.7731	

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	3.4828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	6.7800e-003	9.1600e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2789
Total	3.4831	6.7800e-003	9.1600e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	1.2766	1.2766	1.1000e-004	0.0000	1.2789

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.480588	0.067655	0.152308	0.148424	0.059174	0.006668	0.036554	0.035496	0.000914	0.001885	0.007619	0.000654	0.002062

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	97.7999	97.7999	0.0164	3.4100e-003	99.2006
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	97.7999	97.7999	0.0164	3.4100e-003	99.2006
NaturalGas Mitigated	0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	480.2316	480.2316	9.2000e-003	8.8000e-003	483.1542
NaturalGas Unmitigated	0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	480.2316	480.2316	9.2000e-003	8.8000e-003	483.1542

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					
Apartments Mid Rise	3.97482e+006	0.0214	0.1832	0.0779	1.1700e-003		0.0148	0.0148		0.0148	0.0148	0.0000	212.1115	212.1115	4.0700e-003	3.8900e-003	213.4024
City Park	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
Enclosed Parking Structure	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
General Office Building	2.48e+006	0.0134	0.1216	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.3422	132.3422	2.5400e-003	2.4300e-003	133.1477
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
Recreational Swimming Pool	64380	3.5000e-004	3.1600e-003	2.6500e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.4356	3.4356	7.0000e-005	6.0000e-005	3.4565
Research & Development	2.48e+006	0.0134	0.1216	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.3422	132.3422	2.5400e-003	2.4300e-003	133.1477
Unenclosed Parking with Elevator	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
Total		0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	480.2316	480.2316	9.2200e-003	8.8100e-003	483.1542

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					
City Park	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
Enclosed Parking Structure	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
General Office Building	2.48e+006	0.0134	0.1216	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.3422	132.3422	2.5400e-003	2.4300e-003	133.1477
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
Recreational Swimming Pool	64380	3.5000e-004	3.1600e-003	2.6500e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.4356	3.4356	7.0000e-005	6.0000e-005	3.4565
Research & Development	2.48e+006	0.0134	0.1216	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.3422	132.3422	2.5400e-003	2.4300e-003	133.1477
Unenclosed Parking with Elevator	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
Apartments Mid Rise	3.97482e+006	0.0214	0.1832	0.0779	1.1700e-003		0.0148	0.0148		0.0148	0.0148	0.0000	212.1115	212.1115	4.0700e-003	3.8900e-003	213.4024
Total		0.0485	0.4295	0.2848	2.6500e-003		0.0335	0.0335		0.0335	0.0335	0.0000	480.2316	480.2316	9.2200e-003	8.8100e-003	483.1542

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	550200	35.7928	5.9900e-003	1.2500e-003	36.3054
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	953160	62.0071	0.0104	2.1600e-003	62.8951
Total		97.7999	0.0164	3.4100e-003	99.2006

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	550200	35.7928	5.9900e-003	1.2500e-003	36.3054
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	953160	62.0071	0.0104	2.1600e-003	62.8951
Total		97.7999	0.0164	3.4100e-003	99.2006

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

No Hearths Installed

Use Low VOC Cleaning Supplies

	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	8.1413	0.0241	2.0460	1.0000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	3.2170	3.2170	2.8600e-003	0.0000	3.2770
Unmitigated	8.7196	0.0269	2.3282	1.2000e-004		0.0188	0.0188		0.0188	0.0188	0.0000	91.2170	91.2170	5.4400e-003	1.6000e-003	91.8282

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	1.2502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3884					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	8.8300e-003	0.0000	4.8000e-004	0.0000		6.1000e-003	6.1000e-003		6.0400e-003	6.0400e-003	0.0000	87.4291	87.4291	1.6800e-003	1.6000e-003	87.9612
Landscaping	0.0722	0.0269	2.3277	1.2000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	3.7879	3.7879	3.7700e-003	0.0000	3.8670
Total	8.7196	0.0269	2.3282	1.2000e-004		0.0188	0.0188		0.0188	0.0188	0.0000	91.2170	91.2170	5.4500e-003	1.6000e-003	91.8282

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	1.2502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.8360					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0551	0.0241	2.0460	1.0000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	3.2170	3.2170	2.8600e-003	0.0000	3.2770
Total	8.1413	0.0241	2.0460	1.0000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	3.2170	3.2170	2.8600e-003	0.0000	3.2770

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Reclaimed Water

Use Grey Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.2078	0.0304	0.0186	23.5988
Unmitigated	17.9856	0.0305	0.0186	24.3878

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.6652 / 0	12.4683	0.0226	0.0138	17.2225
City Park	0 / 4.9494	1.1269	1.9000e-004	4.0000e-005	1.1431
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.23282 / 0	3.6934	6.6800e-003	4.0900e-003	5.1017
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.824455 / 0.505311	0.6970	1.0700e-003	6.5000e-004	0.9205
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.9856	0.0305	0.0186	24.3878

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.6652 / 0	11.8891	0.0225	0.0138	16.6350
City Park	0 / 4.9494	1.1269	1.9000e-004	4.0000e-005	1.1431
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.23282 / 0	3.5218	6.6500e-003	4.0800e-003	4.9277
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.824455 / 0.505311	0.6699	1.0700e-003	6.5000e-004	0.8931
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.2078	0.0304	0.0186	23.5988

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	61.6605	3.6440	0.0000	138.1852
Unmitigated	61.6605	3.6440	0.0000	138.1852

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	142.14	28.8531	1.7052	0.0000	64.6617
City Park	1.68	0.3410	0.0202	0.0000	0.7643
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	74.4	15.1025	0.8925	0.0000	33.8457
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	79.46	16.1297	0.9532	0.0000	36.1476
Research & Development	6.08	1.2342	0.0729	0.0000	2.7659
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		61.6605	3.6440	0.0000	138.1852

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	142.14	28.8531	1.7052	0.0000	64.6617
City Park	1.68	0.3410	0.0202	0.0000	0.7643
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	74.4	15.1025	0.8925	0.0000	33.8457
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	79.46	16.1297	0.9532	0.0000	36.1476
Research & Development	6.08	1.2342	0.0729	0.0000	2.7659
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		61.6605	3.6440	0.0000	138.1852

9.0 Operational Offroad

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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-248.6050	0.0000	0.0000	-248.6050

10.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	46.9 / 0	-290.7800	0.0000	0.0000	-290.7800
Grassland	0 / 6.5	28.0150	0.0000	0.0000	28.0150
Wetlands	0 / 4	0.0000	0.0000	0.0000	0.0000
Total		-262.7650	0.0000	0.0000	-262.7650

10.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	20	14.1600	0.0000	0.0000	14.1600
Total		14.1600	0.0000	0.0000	14.1600

Nishi Development Project - Phase 2 (Unmitigated)
Yolo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	82.50	1000sqft	1.30	82,500.00	0
Research & Development	82.50	1000sqft	1.30	82,500.00	0
Parking Lot	538.00	Space	3.00	215,200.00	0
Unenclosed Parking Structure	210.00	Space	0.00	84,000.00	0
Health Club	10.00	1000sqft	0.00	10,000.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.00	7,000.00	0
Quality Restaurant	2.00	1000sqft	0.00	2,000.00	0
Apartments Mid Rise	331.00	Dwelling Unit	5.00	331,000.00	947
Convenience Market (24 Hour)	1.00	1000sqft	0.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	2			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	143.42	CH4 Intensity (lb/MWhr)	0.024	N2O Intensity (lb/MWhr)	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assumes 33% renewable portfolio standard is achieved by 2019.

Land Use - Lot acreage and sqft based on project description.

Construction Phase - Approximate time of construction

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Local landfill is approximately 10 miles away. Building material will likely come from Sacramento, approximately 30 miles away. Site is relatively flat

On-road Fugitive Dust - Majority of travel will be on paved roads

Demolition -

Grading - Total disturbed acres = total land use acres to be built in this phase

Architectural Coating - Arch Coating sqft corrected using Section 4.7 in Appendix A and Section 7 in Appendix E of the CalEEMod User's Guide

Vehicle Trips - Mobile operational emissions calculated offmodel.

Road Dust - Assume majority paved

Woodstoves - All for sale units have gas fireplace. All rental units have no fireplace. No woodburning.

Area Coating - Non-Residential area painted calculated separately.

Energy Use - Use DEG calculated energy use and offmodel energy emission calculations.

Water And Wastewater - Water usage from Cunningham Engineering, All retail water is apportioned to the restaurant . R&D water use is lumped under general office building. Davis' Water Pollution Control plan is 100% aerobic.

Solid Waste -

Sequestration - Assumption

Construction Off-road Equipment Mitigation -

Area Mitigation - Default

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	137,728.00	109,854.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	413,184.00	277,500.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	223,425.00	253,800.00
tblArchitecturalCoating	ConstArea_Residential_Interior	670,275.00	761,400.00
tblAreaCoating	Area_Nonresidential_Interior	413184	277500
tblAreaCoating	Area_Residential_Exterior	223425	253800
tblAreaCoating	Area_Residential_Interior	670275	761400
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	300.00	511.00
tblConstructionPhase	NumDays	30.00	132.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	PhaseEndDate	1/30/2020	12/31/2021
tblConstructionPhase	PhaseEndDate	12/24/2021	1/14/2020
tblConstructionPhase	PhaseStartDate	1/15/2020	12/16/2021
tblConstructionPhase	PhaseStartDate	12/16/2021	1/1/2020
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	6.65	0.00
tblEnergyUse	LightingElect	3.62	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	LightingElect	8.49	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	8.49	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	2,554.47	0.00
tblEnergyUse	NT24E	1.98	0.00
tblEnergyUse	NT24E	3.62	0.00
tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24E	17.72	0.00
tblEnergyUse	NT24E	17.72	0.00

tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24NG	1,716.22	0.00
tblEnergyUse	NT24NG	0.36	0.00
tblEnergyUse	NT24NG	0.47	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	68.83	0.00
tblEnergyUse	NT24NG	68.83	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	T24E	322.48	0.00
tblEnergyUse	T24E	4.76	0.00
tblEnergyUse	T24E	3.93	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24E	7.40	0.00
tblEnergyUse	T24E	7.40	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24NG	8,261.25	12,822.00
tblEnergyUse	T24NG	11.93	9.00
tblEnergyUse	T24NG	16.83	31.00
tblEnergyUse	T24NG	19.55	9.00
tblEnergyUse	T24NG	42.71	9.00
tblEnergyUse	T24NG	42.71	9.00
tblEnergyUse	T24NG	19.55	31.00
tblFireplaces	FireplaceWoodMass	4,558.40	0.00
tblFireplaces	NumberGas	182.05	124.00
tblFireplaces	NumberNoFireplace	33.10	197.00
tblFireplaces	NumberWood	115.85	0.00
tblGrading	AcresOfGrading	330.00	10.50
tblLandUse	LotAcreage	1.89	1.30

tblLandUse	LotAcreage	1.89	1.30
tblLandUse	LotAcreage	4.84	3.00
tblLandUse	LotAcreage	1.89	0.00
tblLandUse	LotAcreage	0.23	0.00
tblLandUse	LotAcreage	0.16	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	8.71	5.00
tblLandUse	LotAcreage	0.02	0.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	641.35	143.42
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	94	99
tblSolidWaste	SolidWasteGenerationRate	152.26	147.66
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00

tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripNumber	115.00	20.00
tblTripsAndVMT	WorkerTripNumber	425.00	120.00
tblTripsAndVMT	WorkerTripNumber	85.00	76.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	127.15	0.00

tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	21,565,982.48	18,847,554.00
tblWater	IndoorWaterUseRate	74,072.52	0.00
tblWater	IndoorWaterUseRate	14,663,034.21	5,396,345.00
tblWater	IndoorWaterUseRate	591,431.44	0.00
tblWater	IndoorWaterUseRate	2,124,735.99	0.00
tblWater	IndoorWaterUseRate	607,067.42	2,392,575.00
tblWater	IndoorWaterUseRate	40,564,750.64	0.00
tblWater	OutdoorWaterUseRate	13,595,945.48	0.00
tblWater	OutdoorWaterUseRate	45,399.29	0.00
tblWater	OutdoorWaterUseRate	8,987,020.97	0.00
tblWater	OutdoorWaterUseRate	362,490.24	0.00
tblWater	OutdoorWaterUseRate	135,621.45	0.00
tblWater	OutdoorWaterUseRate	38,748.98	0.00
tblWoodstoves	NumberCatalytic	16.55	16.05
tblWoodstoves	NumberNoncatalytic	16.55	16.05
tblWoodstoves	WoodstoveWoodMass	4,558.40	0.00

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					
2019	4.9510	54.2562	41.0121	0.0638	9.4484	2.5060	11.9544	3.6798	2.3055	5.9853	0.0000	6,263.889 2	6,263.889 2	1.9398	0.0000	6,304.625 0
2020	5.2753	36.8752	38.5205	0.0815	31.9334	1.9395	33.8729	3.4700	1.8070	5.2770	0.0000	7,422.560 4	7,422.560 4	1.3689	0.0000	7,451.307 1
2021	616.9623	20.5774	22.9463	0.0576	29.4270	1.0335	30.4605	3.1998	0.9702	4.1699	0.0000	5,134.787 9	5,134.787 9	0.6569	0.0000	5,148.582 5
Total	627.1886	111.7087	102.4789	0.2028	70.8088	5.4789	76.2877	10.3496	5.0827	15.4323	0.0000	18,821.23 76	18,821.23 76	3.9656	0.0000	18,904.51 46

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					
2019	4.9510	54.2562	41.0121	0.0638	6.0898	2.5060	8.5958	1.8541	2.3055	4.1597	0.0000	6,263.889 2	6,263.889 2	1.9398	0.0000	6,304.625 0
2020	5.2753	36.8752	38.5205	0.0815	31.9334	1.9395	33.8729	3.4700	1.8070	5.2770	0.0000	7,422.560 4	7,422.560 4	1.3689	0.0000	7,451.307 1
2021	616.9623	20.5774	22.9463	0.0576	29.4270	1.0335	30.4605	3.1998	0.9702	4.1699	0.0000	5,134.787 9	5,134.787 9	0.6569	0.0000	5,148.582 5
Total	627.1886	111.7087	102.4789	0.2028	67.4502	5.4789	72.9292	8.5239	5.0827	13.6066	0.0000	18,821.23 76	18,821.23 76	3.9656	0.0000	18,904.51 46

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	4.74	0.00	4.40	17.64	0.00	11.83	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	20.6007	0.3162	27.4459	1.4500e-003		0.3177	0.3177		0.3159	0.3159	0.0000	2,675.2574	2,675.2574	0.0983	0.0481	2,692.2456
Energy	0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	20.8825	2.8100	29.0965	0.0168	0.0000	0.5124	0.5124	0.0000	0.5107	0.5107	0.0000	5,749.9011	5,749.9011	0.1572	0.1045	5,785.6010

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	20.3599	0.3162	27.4327	1.4500e-003		0.1514	0.1514		0.1514	0.1514	0.0000	49.3750	49.3750	0.0480	0.0000	50.3825
Energy	0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	20.6418	2.8100	29.0834	0.0168	0.0000	0.3461	0.3461	0.0000	0.3461	0.3461	0.0000	3,124.0187	3,124.0187	0.1069	0.0564	3,143.7380

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.15	0.00	0.05	0.00	0.00	32.45	32.45	0.00	32.22	32.22	0.00	45.67	45.67	32.01	46.06	45.66

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	7/1/2019	12/31/2019	5	132	
2	Building Construction	Building Construction	1/1/2020	12/15/2021	5	511	
3	Parking Lot Paving	Paving	1/1/2020	1/14/2020	5	7	
4	Architectural Coating	Architectural Coating	12/16/2021	12/31/2021	5	12	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10.5

Acres of Paving: 0

Residential Indoor: 761,400; Residential Outdoor: 253,800; Non-Residential Indoor: 277,500; Non-Residential Outdoor: 109,854 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	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
Parking Lot Paving	Pavers	2	8.00	125	0.42
Parking Lot Paving	Paving Equipment	2	8.00	130	0.36
Parking Lot 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
Grading	8	20.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	120.00	20.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Parking Lot Paving	6	15.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2019

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					6.1064	0.0000	6.1064	3.3193	0.0000	3.3193			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.312 1	6,111.312 1	1.9336		6,151.916 7
Total	4.8912	54.1978	40.2888	0.0617	6.1064	2.5049	8.6114	3.3193	2.3045	5.6239		6,111.312 1	6,111.312 1	1.9336		6,151.916 7

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	0.0598	0.0584	0.7233	2.0700e-003	3.3419	1.0800e-003	3.3430	0.3604	1.0000e-003	0.3614		152.5771	152.5771	6.2400e-003		152.7082
Total	0.0598	0.0584	0.7233	2.0700e-003	3.3419	1.0800e-003	3.3430	0.3604	1.0000e-003	0.3614		152.5771	152.5771	6.2400e-003		152.7082

3.2 Grading - 2019

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					2.7479	0.0000	2.7479	1.4937	0.0000	1.4937			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045	0.0000	6,111.312 1	6,111.312 1	1.9336		6,151.916 7
Total	4.8912	54.1978	40.2888	0.0617	2.7479	2.5049	5.2528	1.4937	2.3045	3.7982	0.0000	6,111.312 1	6,111.312 1	1.9336		6,151.916 7

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	0.0598	0.0584	0.7233	2.0700e-003	3.3419	1.0800e-003	3.3430	0.3604	1.0000e-003	0.3614		152.5771	152.5771	6.2400e-003		152.7082
Total	0.0598	0.0584	0.7233	2.0700e-003	3.3419	1.0800e-003	3.3430	0.3604	1.0000e-003	0.3614		152.5771	152.5771	6.2400e-003		152.7082

3.3 Building Construction - 2020

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880

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	0.3365	3.6437	2.8618	0.0184	9.3754	0.0804	9.4557	1.0371	0.0739	1.1110		1,730.2221	1,730.2221	0.0109		1,730.4518
Worker	0.3330	0.3227	3.9982	0.0124	20.0516	6.4200e-003	20.0580	2.1626	5.9500e-003	2.1686		879.2012	879.2012	0.0353		879.9420
Total	0.6695	3.9665	6.8599	0.0308	29.4269	0.0868	29.5137	3.1997	0.0799	3.2796		2,609.4233	2,609.4233	0.0462		2,610.3937

3.3 Building Construction - 2020

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880

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	0.3365	3.6437	2.8618	0.0184	9.3754	0.0804	9.4557	1.0371	0.0739	1.1110		1,730.2221	1,730.2221	0.0109		1,730.4518
Worker	0.3330	0.3227	3.9982	0.0124	20.0516	6.4200e-003	20.0580	2.1626	5.9500e-003	2.1686		879.2012	879.2012	0.0353		879.9420
Total	0.6695	3.9665	6.8599	0.0308	29.4269	0.0868	29.5137	3.1997	0.0799	3.2796		2,609.4233	2,609.4233	0.0462		2,610.3937

3.3 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462

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	0.3152	2.9358	2.6625	0.0184	9.3754	0.0722	9.4476	1.0371	0.0664	1.1035		1,727.6143	1,727.6143	0.0107		1,727.8394
Worker	0.3145	0.3013	3.7461	0.0124	20.0516	6.4300e-003	20.0580	2.1626	5.9600e-003	2.1686		864.3919	864.3919	0.0336		865.0970
Total	0.6296	3.2371	6.4087	0.0308	29.4270	0.0786	29.5056	3.1998	0.0723	3.2721		2,592.0062	2,592.0062	0.0443		2,592.9364

3.3 Building Construction - 2021

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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462

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	0.3152	2.9358	2.6625	0.0184	9.3754	0.0722	9.4476	1.0371	0.0664	1.1035		1,727.6143	1,727.6143	0.0107		1,727.8394
Worker	0.3145	0.3013	3.7461	0.0124	20.0516	6.4300e-003	20.0580	2.1626	5.9600e-003	2.1686		864.3919	864.3919	0.0336		865.0970
Total	0.6296	3.2371	6.4087	0.0308	29.4270	0.0786	29.5056	3.1998	0.0723	3.2721		2,592.0062	2,592.0062	0.0443		2,592.9364

3.4 Parking Lot Paving - 2020

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	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	1.1229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.4529	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326

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	0.0416	0.0403	0.4998	1.5500e-003	2.5065	8.0000e-004	2.5073	0.2703	7.4000e-004	0.2711		109.9002	109.9002	4.4100e-003		109.9927
Total	0.0416	0.0403	0.4998	1.5500e-003	2.5065	8.0000e-004	2.5073	0.2703	7.4000e-004	0.2711		109.9002	109.9002	4.4100e-003		109.9927

3.4 Parking Lot Paving - 2020

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	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	1.1229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.4529	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326

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	0.0416	0.0403	0.4998	1.5500e-003	2.5065	8.0000e-004	2.5073	0.2703	7.4000e-004	0.2711		109.9002	109.9002	4.4100e-003		109.9927
Total	0.0416	0.0403	0.4998	1.5500e-003	2.5065	8.0000e-004	2.5073	0.2703	7.4000e-004	0.2711		109.9002	109.9002	4.4100e-003		109.9927

3.5 Architectural Coating - 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					
Archit. Coating	616.5442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	616.7631	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537

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	0.1992	0.1908	2.3726	7.8500e-003	12.6993	4.0700e-003	12.7034	1.3697	3.7800e-003	1.3734		547.4482	547.4482	0.0213		547.8948
Total	0.1992	0.1908	2.3726	7.8500e-003	12.6993	4.0700e-003	12.7034	1.3697	3.7800e-003	1.3734		547.4482	547.4482	0.0213		547.8948

3.5 Architectural Coating - 2021

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	616.5442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537
Total	616.7631	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537

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	0.1992	0.1908	2.3726	7.8500e-003	12.6993	4.0700e-003	12.7034	1.3697	3.7800e-003	1.3734		547.4482	547.4482	0.0213		547.8948
Total	0.1992	0.1908	2.3726	7.8500e-003	12.6993	4.0700e-003	12.7034	1.3697	3.7800e-003	1.3734		547.4482	547.4482	0.0213		547.8948

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Convenience Market (24 Hour)	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.482049	0.067777	0.150566	0.147114	0.058917	0.006597	0.037288	0.036549	0.000902	0.001873	0.007684	0.000636	0.002049

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	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
	lb/day										lb/day					
NaturalGas Mitigated	0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554
NaturalGas Unmitigated	0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554

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					
Convenience Market (24 Hour)	24.6575	2.7000e-004	2.4200e-003	2.0300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.9009	2.9009	6.0000e-005	5.0000e-005	2.9185
General Office Building	7006.85	0.0756	0.6870	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.3352	824.3352	0.0158	0.0151	829.3520
Health Club	246.575	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003		29.0089	29.0089	5.6000e-004	5.3000e-004	29.1854
High Turnover (Sit Down Restaurant)	172.603	1.8600e-003	0.0169	0.0142	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003		20.3062	20.3062	3.9000e-004	3.7000e-004	20.4298
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
Quality Restaurant	49.3151	5.3000e-004	4.8300e-003	4.0600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		5.8018	5.8018	1.1000e-004	1.1000e-004	5.8371
Research & Development	7006.85	0.0756	0.6870	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.3352	824.3352	0.0158	0.0151	829.3520
Unenclosed Parking Structure	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
Apartments Mid Rise	11627.6	0.1254	1.0716	0.4560	6.8400e-003		0.0866	0.0866		0.0866	0.0866		1,367.9555	1,367.9555	0.0262	0.0251	1,376.2807
Total		0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554

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					
General Office Building	7.00685	0.0756	0.6870	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.3352	824.3352	0.0158	0.0151	829.3520
Health Club	0.246575	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003		29.0089	29.0089	5.6000e-004	5.3000e-004	29.1854
High Turnover (Sit Down Restaurant)	0.172603	1.8600e-003	0.0169	0.0142	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003		20.3062	20.3062	3.9000e-004	3.7000e-004	20.4298
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
Quality Restaurant	0.0493151	5.3000e-004	4.8300e-003	4.0600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		5.8018	5.8018	1.1000e-004	1.1000e-004	5.8371
Research & Development	7.00685	0.0756	0.6870	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.3352	824.3352	0.0158	0.0151	829.3520
Unenclosed Parking Structure	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
Apartments Mid Rise	11.6276	0.1254	1.0716	0.4560	6.8400e-003		0.0866	0.0866		0.0866	0.0866		1,367.9555	1,367.9555	0.0262	0.0251	1,376.2807
Convenience Market (24 Hour)	0.0246575	2.7000e-004	2.4200e-003	2.0300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.9009	2.9009	6.0000e-005	5.0000e-005	2.9185
Total		0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

No Hearths Installed

	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	20.3599	0.3162	27.4327	1.4500e-003		0.1514	0.1514		0.1514	0.1514	0.0000	49.3750	49.3750	0.0480	0.0000	50.3825
Unmitigated	20.6007	0.3162	27.4459	1.4500e-003		0.3177	0.3177		0.3159	0.3159	0.0000	2,675.2574	2,675.2574	0.0983	0.0481	2,692.2456

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	2.0801					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	17.4453					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2407	1.0000e-005	0.0131	0.0000		0.1663	0.1663		0.1646	0.1646	0.0000	2,625.8824	2,625.8824	0.0503	0.0481	2,641.8630
Landscaping	0.8346	0.3162	27.4327	1.4500e-003		0.1514	0.1514		0.1514	0.1514		49.3750	49.3750	0.0480		50.3825
Total	20.6007	0.3162	27.4459	1.4500e-003		0.3177	0.3177		0.3160	0.3160	0.0000	2,675.2574	2,675.2574	0.0983	0.0481	2,692.2456

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	2.0801					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	17.4453					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8346	0.3162	27.4327	1.4500e-003		0.1514	0.1514		0.1514	0.1514		49.3750	49.3750	0.0480		50.3825
Total	20.3599	0.3162	27.4327	1.4500e-003		0.1514	0.1514		0.1514	0.1514	0.0000	49.3750	49.3750	0.0480	0.0000	50.3825

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Use Grey Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Nishi Development Project - Phase 2 (Mitigated)
Yolo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	82.50	1000sqft	1.30	82,500.00	0
Research & Development	82.50	1000sqft	1.30	82,500.00	0
Parking Lot	538.00	Space	3.00	215,200.00	0
Unenclosed Parking Structure	210.00	Space	0.00	84,000.00	0
Health Club	10.00	1000sqft	0.00	10,000.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.00	7,000.00	0
Quality Restaurant	2.00	1000sqft	0.00	2,000.00	0
Apartments Mid Rise	331.00	Dwelling Unit	5.00	331,000.00	947
Convenience Market (24 Hour)	1.00	1000sqft	0.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	2			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	143.42	CH4 Intensity (lb/MW hr)	0.024	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assumes 33% renewable portfolio standard is achieved by 2019.

Land Use - Lot acreage and sqft based on project description.

Construction Phase - Approximate time of construction

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Local landfill is approximately 10 miles away. Building material will likely come from Sacramento, approximately 30 miles away. Site is relatively flat

On-road Fugitive Dust - Majority of travel will be on paved roads

Demolition -

Grading - Total disturbed acres = total land use acres to be built in this phase

Architectural Coating - Arch Coating sqft corrected using Section 4.7 in Appendix A and Section 7 in Appendix E of the CalEEMod User's Guide

Vehicle Trips - Mobile operational emissions calculated offmodel.

Road Dust - Assume majority paved

Woodstoves - All for sale units have gas fireplace. All rental units have no fireplace. No woodburning.

Area Coating - Non-Residential area painted calculated separately.

Energy Use - Use DEG calculated energy use and offmodel energy emission calculations.

Water And Wastewater - Water usage from Cunningham Engineering, All retail water is apportioned to the restaurant . R&D water use is lumped under general office building. Davis' Water Pollution Control plan is 100% aerobic.

Solid Waste -

Sequestration - Assumption

Construction Off-road Equipment Mitigation -

Area Mitigation - Apply mitigation to reduce annual ROG emissions.

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	137,728.00	109,854.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	413,184.00	277,500.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	223,425.00	253,800.00
tblArchitecturalCoating	ConstArea_Residential_Interior	670,275.00	761,400.00
tblAreaCoating	Area_Nonresidential_Interior	413184	277500
tblAreaCoating	Area_Residential_Exterior	223425	253800
tblAreaCoating	Area_Residential_Interior	670275	761400
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	300.00	511.00
tblConstructionPhase	NumDays	30.00	132.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	PhaseEndDate	1/30/2020	12/31/2021
tblConstructionPhase	PhaseEndDate	12/24/2021	1/14/2020
tblConstructionPhase	PhaseStartDate	1/15/2020	12/16/2021
tblConstructionPhase	PhaseStartDate	12/16/2021	1/1/2020
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	6.65	0.00
tblEnergyUse	LightingElect	3.62	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	LightingElect	8.49	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	8.49	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	2,554.47	0.00
tblEnergyUse	NT24E	1.98	0.00
tblEnergyUse	NT24E	3.62	0.00
tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24E	17.72	0.00
tblEnergyUse	NT24E	17.72	0.00

tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24NG	1,716.22	0.00
tblEnergyUse	NT24NG	0.36	0.00
tblEnergyUse	NT24NG	0.47	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	68.83	0.00
tblEnergyUse	NT24NG	68.83	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	T24E	322.48	0.00
tblEnergyUse	T24E	4.76	0.00
tblEnergyUse	T24E	3.93	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24E	7.40	0.00
tblEnergyUse	T24E	7.40	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24NG	8,261.25	12,822.00
tblEnergyUse	T24NG	11.93	9.00
tblEnergyUse	T24NG	16.83	31.00
tblEnergyUse	T24NG	19.55	9.00
tblEnergyUse	T24NG	42.71	9.00
tblEnergyUse	T24NG	42.71	9.00
tblEnergyUse	T24NG	19.55	31.00
tblFireplaces	FireplaceWoodMass	4,558.40	0.00
tblFireplaces	NumberGas	182.05	124.00
tblFireplaces	NumberNoFireplace	33.10	197.00
tblFireplaces	NumberWood	115.85	0.00
tblGrading	AcresOfGrading	330.00	10.50
tblLandUse	LotAcreage	1.89	1.30

tblLandUse	LotAcreage	1.89	1.30
tblLandUse	LotAcreage	4.84	3.00
tblLandUse	LotAcreage	1.89	0.00
tblLandUse	LotAcreage	0.23	0.00
tblLandUse	LotAcreage	0.16	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	8.71	5.00
tblLandUse	LotAcreage	0.02	0.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	641.35	143.42
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	94	99
tblSolidWaste	SolidWasteGenerationRate	152.26	147.66
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00

tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripNumber	115.00	20.00
tblTripsAndVMT	WorkerTripNumber	425.00	120.00
tblTripsAndVMT	WorkerTripNumber	85.00	76.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	127.15	0.00

tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	21,565,982.48	18,847,554.00
tblWater	IndoorWaterUseRate	74,072.52	0.00
tblWater	IndoorWaterUseRate	14,663,034.21	5,396,345.00
tblWater	IndoorWaterUseRate	591,431.44	0.00
tblWater	IndoorWaterUseRate	2,124,735.99	0.00
tblWater	IndoorWaterUseRate	607,067.42	2,392,575.00
tblWater	IndoorWaterUseRate	40,564,750.64	0.00
tblWater	OutdoorWaterUseRate	13,595,945.48	0.00
tblWater	OutdoorWaterUseRate	45,399.29	0.00
tblWater	OutdoorWaterUseRate	8,987,020.97	0.00
tblWater	OutdoorWaterUseRate	362,490.24	0.00
tblWater	OutdoorWaterUseRate	135,621.45	0.00
tblWater	OutdoorWaterUseRate	38,748.98	0.00
tblWoodstoves	NumberCatalytic	16.55	16.05
tblWoodstoves	NumberNoncatalytic	16.55	16.05
tblWoodstoves	WoodstoveWoodMass	4,558.40	0.00

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					
2019	4.9510	54.2562	41.0121	0.0638	9.4484	2.5060	11.9544	3.6798	2.3055	5.9853	0.0000	6,263.889 2	6,263.889 2	1.9398	0.0000	6,304.625 0
2020	5.2753	36.8752	38.5205	0.0815	31.9334	1.9395	33.8729	3.4700	1.8070	5.2770	0.0000	7,422.560 4	7,422.560 4	1.3689	0.0000	7,451.307 1
2021	616.9623	20.5774	22.9463	0.0576	29.4270	1.0335	30.4605	3.1998	0.9702	4.1699	0.0000	5,134.787 9	5,134.787 9	0.6569	0.0000	5,148.582 5
Total	627.1886	111.7087	102.4789	0.2028	70.8088	5.4789	76.2877	10.3496	5.0827	15.4323	0.0000	18,821.23 76	18,821.23 76	3.9656	0.0000	18,904.51 46

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					
2019	4.9510	54.2562	41.0121	0.0638	6.0898	2.5060	8.5958	1.8541	2.3055	4.1597	0.0000	6,263.889 2	6,263.889 2	1.9398	0.0000	6,304.625 0
2020	5.2753	36.8752	38.5205	0.0815	31.9334	1.9395	33.8729	3.4700	1.8070	5.2770	0.0000	7,422.560 4	7,422.560 4	1.3689	0.0000	7,451.307 1
2021	616.9623	20.5774	22.9463	0.0576	29.4270	1.0335	30.4605	3.1998	0.9702	4.1699	0.0000	5,134.787 9	5,134.787 9	0.6569	0.0000	5,148.582 5
Total	627.1886	111.7087	102.4789	0.2028	67.4502	5.4789	72.9292	8.5239	5.0827	13.6066	0.0000	18,821.23 76	18,821.23 76	3.9656	0.0000	18,904.51 46

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	4.74	0.00	4.40	17.64	0.00	11.83	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	20.6007	0.3162	27.4459	1.4500e-003		0.3177	0.3177		0.3159	0.3159	0.0000	2,675.2574	2,675.2574	0.0983	0.0481	2,692.2456
Energy	0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	20.8825	2.8100	29.0965	0.0168	0.0000	0.5124	0.5124	0.0000	0.5107	0.5107	0.0000	5,749.9011	5,749.9011	0.1572	0.1045	5,785.6010

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	18.8590	0.2830	24.1311	1.1900e-003		0.1320	0.1320		0.1320	0.1320	0.0000	41.9463	41.9463	0.0365	0.0000	42.7128
Energy	0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	19.1408	2.7769	25.7818	0.0166	0.0000	0.3267	0.3267	0.0000	0.3267	0.3267	0.0000	3,116.5899	3,116.5899	0.0954	0.0564	3,136.0683

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	8.34	1.18	11.39	1.55	0.00	36.24	36.24	0.00	36.02	36.02	0.00	45.80	45.80	39.31	46.06	45.80

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	7/1/2019	12/31/2019	5	132	
2	Building Construction	Building Construction	1/1/2020	12/15/2021	5	511	
3	Parking Lot Paving	Paving	1/1/2020	1/14/2020	5	7	
4	Architectural Coating	Architectural Coating	12/16/2021	12/31/2021	5	12	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10.5

Acres of Paving: 0

Residential Indoor: 761,400; Residential Outdoor: 253,800; Non-Residential Indoor: 277,500; Non-Residential Outdoor: 109,854 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	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
Parking Lot Paving	Pavers	2	8.00	125	0.42
Parking Lot Paving	Paving Equipment	2	8.00	130	0.36
Parking Lot 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
Grading	8	20.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	120.00	20.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Parking Lot Paving	6	15.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2019

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					6.1064	0.0000	6.1064	3.3193	0.0000	3.3193			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.312 1	6,111.312 1	1.9336		6,151.916 7
Total	4.8912	54.1978	40.2888	0.0617	6.1064	2.5049	8.6114	3.3193	2.3045	5.6239		6,111.312 1	6,111.312 1	1.9336		6,151.916 7

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	0.0598	0.0584	0.7233	2.0700e-003	3.3419	1.0800e-003	3.3430	0.3604	1.0000e-003	0.3614		152.5771	152.5771	6.2400e-003		152.7082
Total	0.0598	0.0584	0.7233	2.0700e-003	3.3419	1.0800e-003	3.3430	0.3604	1.0000e-003	0.3614		152.5771	152.5771	6.2400e-003		152.7082

3.2 Grading - 2019

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					2.7479	0.0000	2.7479	1.4937	0.0000	1.4937			0.0000			0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045	0.0000	6,111.312 1	6,111.312 1	1.9336		6,151.916 7
Total	4.8912	54.1978	40.2888	0.0617	2.7479	2.5049	5.2528	1.4937	2.3045	3.7982	0.0000	6,111.312 1	6,111.312 1	1.9336		6,151.916 7

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	0.0598	0.0584	0.7233	2.0700e-003	3.3419	1.0800e-003	3.3430	0.3604	1.0000e-003	0.3614		152.5771	152.5771	6.2400e-003		152.7082
Total	0.0598	0.0584	0.7233	2.0700e-003	3.3419	1.0800e-003	3.3430	0.3604	1.0000e-003	0.3614		152.5771	152.5771	6.2400e-003		152.7082

3.3 Building Construction - 2020

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880

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	0.3365	3.6437	2.8618	0.0184	9.3754	0.0804	9.4557	1.0371	0.0739	1.1110		1,730.2221	1,730.2221	0.0109		1,730.4518
Worker	0.3330	0.3227	3.9982	0.0124	20.0516	6.4200e-003	20.0580	2.1626	5.9500e-003	2.1686		879.2012	879.2012	0.0353		879.9420
Total	0.6695	3.9665	6.8599	0.0308	29.4269	0.0868	29.5137	3.1997	0.0799	3.2796		2,609.4233	2,609.4233	0.0462		2,610.3937

3.3 Building Construction - 2020

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880

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	0.3365	3.6437	2.8618	0.0184	9.3754	0.0804	9.4557	1.0371	0.0739	1.1110		1,730.2221	1,730.2221	0.0109		1,730.4518
Worker	0.3330	0.3227	3.9982	0.0124	20.0516	6.4200e-003	20.0580	2.1626	5.9500e-003	2.1686		879.2012	879.2012	0.0353		879.9420
Total	0.6695	3.9665	6.8599	0.0308	29.4269	0.0868	29.5137	3.1997	0.0799	3.2796		2,609.4233	2,609.4233	0.0462		2,610.3937

3.3 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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462
Total	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979		2,542.7817	2,542.7817	0.6126		2,555.6462

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	0.3152	2.9358	2.6625	0.0184	9.3754	0.0722	9.4476	1.0371	0.0664	1.1035		1,727.6143	1,727.6143	0.0107		1,727.8394
Worker	0.3145	0.3013	3.7461	0.0124	20.0516	6.4300e-003	20.0580	2.1626	5.9600e-003	2.1686		864.3919	864.3919	0.0336		865.0970
Total	0.6296	3.2371	6.4087	0.0308	29.4270	0.0786	29.5056	3.1998	0.0723	3.2721		2,592.0062	2,592.0062	0.0443		2,592.9364

3.3 Building Construction - 2021

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	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462
Total	1.8931	17.3403	16.5376	0.0268		0.9549	0.9549		0.8979	0.8979	0.0000	2,542.7817	2,542.7817	0.6126		2,555.6462

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	0.3152	2.9358	2.6625	0.0184	9.3754	0.0722	9.4476	1.0371	0.0664	1.1035		1,727.6143	1,727.6143	0.0107		1,727.8394
Worker	0.3145	0.3013	3.7461	0.0124	20.0516	6.4300e-003	20.0580	2.1626	5.9600e-003	2.1686		864.3919	864.3919	0.0336		865.0970
Total	0.6296	3.2371	6.4087	0.0308	29.4270	0.0786	29.5056	3.1998	0.0723	3.2721		2,592.0062	2,592.0062	0.0443		2,592.9364

3.4 Parking Lot Paving - 2020

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	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	1.1229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.4529	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326

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	0.0416	0.0403	0.4998	1.5500e-003	2.5065	8.0000e-004	2.5073	0.2703	7.4000e-004	0.2711		109.9002	109.9002	4.4100e-003		109.9927
Total	0.0416	0.0403	0.4998	1.5500e-003	2.5065	8.0000e-004	2.5073	0.2703	7.4000e-004	0.2711		109.9002	109.9002	4.4100e-003		109.9927

3.4 Parking Lot Paving - 2020

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	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	1.1229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.4529	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326

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	0.0416	0.0403	0.4998	1.5500e-003	2.5065	8.0000e-004	2.5073	0.2703	7.4000e-004	0.2711		109.9002	109.9002	4.4100e-003		109.9927
Total	0.0416	0.0403	0.4998	1.5500e-003	2.5065	8.0000e-004	2.5073	0.2703	7.4000e-004	0.2711		109.9002	109.9002	4.4100e-003		109.9927

3.5 Architectural Coating - 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					
Archit. Coating	616.5442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	616.7631	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537

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	0.1992	0.1908	2.3726	7.8500e-003	12.6993	4.0700e-003	12.7034	1.3697	3.7800e-003	1.3734		547.4482	547.4482	0.0213		547.8948
Total	0.1992	0.1908	2.3726	7.8500e-003	12.6993	4.0700e-003	12.7034	1.3697	3.7800e-003	1.3734		547.4482	547.4482	0.0213		547.8948

3.5 Architectural Coating - 2021

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	616.5442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537
Total	616.7631	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537

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	0.1992	0.1908	2.3726	7.8500e-003	12.6993	4.0700e-003	12.7034	1.3697	3.7800e-003	1.3734		547.4482	547.4482	0.0213		547.8948
Total	0.1992	0.1908	2.3726	7.8500e-003	12.6993	4.0700e-003	12.7034	1.3697	3.7800e-003	1.3734		547.4482	547.4482	0.0213		547.8948

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Convenience Market (24 Hour)	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.482049	0.067777	0.150566	0.147114	0.058917	0.006597	0.037288	0.036549	0.000902	0.001873	0.007684	0.000636	0.002049

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	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
	lb/day										lb/day					
NaturalGas Mitigated	0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554
NaturalGas Unmitigated	0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554

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					
Convenience Market (24 Hour)	24.6575	2.7000e-004	2.4200e-003	2.0300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.9009	2.9009	6.0000e-005	5.0000e-005	2.9185
General Office Building	7006.85	0.0756	0.6870	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.3352	824.3352	0.0158	0.0151	829.3520
Health Club	246.575	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003		29.0089	29.0089	5.6000e-004	5.3000e-004	29.1854
High Turnover (Sit Down Restaurant)	172.603	1.8600e-003	0.0169	0.0142	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003		20.3062	20.3062	3.9000e-004	3.7000e-004	20.4298
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
Quality Restaurant	49.3151	5.3000e-004	4.8300e-003	4.0600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		5.8018	5.8018	1.1000e-004	1.1000e-004	5.8371
Research & Development	7006.85	0.0756	0.6870	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.3352	824.3352	0.0158	0.0151	829.3520
Unenclosed Parking Structure	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
Apartments Mid Rise	11627.6	0.1254	1.0716	0.4560	6.8400e-003		0.0866	0.0866		0.0866	0.0866		1,367.9555	1,367.9555	0.0262	0.0251	1,376.2807
Total		0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554

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					
General Office Building	7.00685	0.0756	0.6870	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.3352	824.3352	0.0158	0.0151	829.3520
Health Club	0.246575	2.6600e-003	0.0242	0.0203	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003		29.0089	29.0089	5.6000e-004	5.3000e-004	29.1854
High Turnover (Sit Down Restaurant)	0.172603	1.8600e-003	0.0169	0.0142	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003		20.3062	20.3062	3.9000e-004	3.7000e-004	20.4298
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
Quality Restaurant	0.0493151	5.3000e-004	4.8300e-003	4.0600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		5.8018	5.8018	1.1000e-004	1.1000e-004	5.8371
Research & Development	7.00685	0.0756	0.6870	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.3352	824.3352	0.0158	0.0151	829.3520
Unenclosed Parking Structure	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
Apartments Mid Rise	11.6276	0.1254	1.0716	0.4560	6.8400e-003		0.0866	0.0866		0.0866	0.0866		1,367.9555	1,367.9555	0.0262	0.0251	1,376.2807
Convenience Market (24 Hour)	0.0246575	2.7000e-004	2.4200e-003	2.0300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.9009	2.9009	6.0000e-005	5.0000e-005	2.9185
Total		0.2818	2.4938	1.6507	0.0154		0.1947	0.1947		0.1947	0.1947		3,074.6437	3,074.6437	0.0589	0.0564	3,093.3554

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use only Natural Gas Hearths
- No Hearths Installed
- Use Low VOC Cleaning Supplies

	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	18.8590	0.2830	24.1311	1.1900e-003		0.1320	0.1320		0.1320	0.1320	0.0000	41.9463	41.9463	0.0365	0.0000	42.7128
Unmitigated	20.6007	0.3162	27.4459	1.4500e-003		0.3177	0.3177		0.3159	0.3159	0.0000	2,675.2574	2,675.2574	0.0983	0.0481	2,692.2456

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	2.0801					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	17.4453					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Hearth	0.2407	1.0000e-005	0.0131	0.0000		0.1663	0.1663		0.1646	0.1646	0.0000	2,625.8824	2,625.8824	0.0503	0.0481		2,641.8630
Landscaping	0.8346	0.3162	27.4327	1.4500e-003		0.1514	0.1514		0.1514	0.1514		49.3750	49.3750	0.0480			50.3825
Total	20.6007	0.3162	27.4459	1.4500e-003		0.3177	0.3177		0.3160	0.3160	0.0000	2,675.2574	2,675.2574	0.0983	0.0481		2,692.2456

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	2.0801					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.1410					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6380	0.2830	24.1311	1.1900e-003		0.1320	0.1320		0.1320	0.1320		41.9463	41.9463	0.0365		42.7128
Total	18.8590	0.2830	24.1311	1.1900e-003		0.1320	0.1320		0.1320	0.1320	0.0000	41.9463	41.9463	0.0365	0.0000	42.7128

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Use Grey Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Nishi Development Project - Phase 2 (Unmitigated)

Yolo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	82.50	1000sqft	1.30	82,500.00	0
Research & Development	82.50	1000sqft	1.30	82,500.00	0
Parking Lot	538.00	Space	3.00	215,200.00	0
Unenclosed Parking Structure	210.00	Space	0.00	84,000.00	0
Health Club	10.00	1000sqft	0.00	10,000.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.00	7,000.00	0
Quality Restaurant	2.00	1000sqft	0.00	2,000.00	0
Apartments Mid Rise	331.00	Dwelling Unit	5.00	331,000.00	947
Convenience Market (24 Hour)	1.00	1000sqft	0.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	2			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	143.42	CH4 Intensity (lb/MW hr)	0.024	N2O Intensity (lb/MW hr)	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assumes 33% renewable portfolio standard is achieved by 2019.

Land Use - Lot acreage and sqft based on project description.

Construction Phase - Approximate time of construction

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Local landfill is approximately 10 miles away. Building material will likely come from Sacramento, approximately 30 miles away. Site is relatively flat

On-road Fugitive Dust - Majority of travel will be on paved roads

Demolition -

Grading - Total disturbed acres = total land use acres to be built in this phase

Architectural Coating - Arch Coating sqft corrected using Section 4.7 in Appendix A and Section 7 in Appendix E of the CalEEMod User's Guide

Vehicle Trips - Mobile operational emissions calculated offmodel.

Road Dust - Assume majority paved

Woodstoves - All for sale units have gas fireplace. All rental units have no fireplace. No woodburning.

Area Coating - Non-Residential area painted calculated separately.

Energy Use - Use DEG calculated energy use and offmodel energy emission calculations.

Water And Wastewater - Water usage from Cunningham Engineering, All retail water is apportioned to the restaurant . R&D water use is lumped under general office building. Davis' Water Pollution Control plan is 100% aerobic.

Solid Waste -

Sequestration - Assumption

Construction Off-road Equipment Mitigation -

Area Mitigation - Default

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	137,728.00	109,854.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	413,184.00	277,500.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	223,425.00	253,800.00
tblArchitecturalCoating	ConstArea_Residential_Interior	670,275.00	761,400.00
tblAreaCoating	Area_Nonresidential_Interior	413184	277500
tblAreaCoating	Area_Residential_Exterior	223425	253800
tblAreaCoating	Area_Residential_Interior	670275	761400
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	300.00	511.00
tblConstructionPhase	NumDays	30.00	132.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	PhaseEndDate	1/30/2020	12/31/2021
tblConstructionPhase	PhaseEndDate	12/24/2021	1/14/2020
tblConstructionPhase	PhaseStartDate	1/15/2020	12/16/2021
tblConstructionPhase	PhaseStartDate	12/16/2021	1/1/2020
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	6.65	0.00
tblEnergyUse	LightingElect	3.62	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	LightingElect	8.49	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	8.49	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	2,554.47	0.00
tblEnergyUse	NT24E	1.98	0.00
tblEnergyUse	NT24E	3.62	0.00
tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24E	17.72	0.00
tblEnergyUse	NT24E	17.72	0.00

tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24NG	1,716.22	0.00
tblEnergyUse	NT24NG	0.36	0.00
tblEnergyUse	NT24NG	0.47	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	68.83	0.00
tblEnergyUse	NT24NG	68.83	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	T24E	322.48	0.00
tblEnergyUse	T24E	4.76	0.00
tblEnergyUse	T24E	3.93	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24E	7.40	0.00
tblEnergyUse	T24E	7.40	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24NG	8,261.25	12,822.00
tblEnergyUse	T24NG	11.93	9.00
tblEnergyUse	T24NG	16.83	31.00
tblEnergyUse	T24NG	19.55	9.00
tblEnergyUse	T24NG	42.71	9.00
tblEnergyUse	T24NG	42.71	9.00
tblEnergyUse	T24NG	19.55	31.00
tblFireplaces	FireplaceWoodMass	4,558.40	0.00
tblFireplaces	NumberGas	182.05	124.00
tblFireplaces	NumberNoFireplace	33.10	197.00
tblFireplaces	NumberWood	115.85	0.00
tblGrading	AcresOfGrading	330.00	10.50
tblLandUse	LotAcreage	1.89	1.30

tblLandUse	LotAcreage	1.89	1.30
tblLandUse	LotAcreage	4.84	3.00
tblLandUse	LotAcreage	1.89	0.00
tblLandUse	LotAcreage	0.23	0.00
tblLandUse	LotAcreage	0.16	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	8.71	5.00
tblLandUse	LotAcreage	0.02	0.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	641.35	143.42
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	94	99
tblSolidWaste	SolidWasteGenerationRate	152.26	147.66
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00

tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripNumber	115.00	20.00
tblTripsAndVMT	WorkerTripNumber	425.00	120.00
tblTripsAndVMT	WorkerTripNumber	85.00	76.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	127.15	0.00

tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	21,565,982.48	18,847,554.00
tblWater	IndoorWaterUseRate	74,072.52	0.00
tblWater	IndoorWaterUseRate	14,663,034.21	5,396,345.00
tblWater	IndoorWaterUseRate	591,431.44	0.00
tblWater	IndoorWaterUseRate	2,124,735.99	0.00
tblWater	IndoorWaterUseRate	607,067.42	2,392,575.00
tblWater	IndoorWaterUseRate	40,564,750.64	0.00
tblWater	OutdoorWaterUseRate	13,595,945.48	0.00
tblWater	OutdoorWaterUseRate	45,399.29	0.00
tblWater	OutdoorWaterUseRate	8,987,020.97	0.00
tblWater	OutdoorWaterUseRate	362,490.24	0.00
tblWater	OutdoorWaterUseRate	135,621.45	0.00
tblWater	OutdoorWaterUseRate	38,748.98	0.00
tblWoodstoves	NumberCatalytic	16.55	16.05
tblWoodstoves	NumberNoncatalytic	16.55	16.05
tblWoodstoves	WoodstoveWoodMass	4,558.40	0.00

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					
2019	0.3261	3.5813	2.7005	4.2000e-003	0.5922	0.1654	0.7576	0.2397	0.1522	0.3919	0.0000	374.2029	374.2029	0.1161	0.0000	376.6419
2020	0.3714	3.1221	3.1874	7.5100e-003	3.3188	0.1609	3.4797	0.3649	0.1510	0.5159	0.0000	612.7001	612.7001	0.0823	0.0000	614.4284
2021	4.0107	2.5983	2.8943	7.0800e-003	3.2093	0.1293	3.3386	0.3528	0.1214	0.4742	0.0000	575.0073	575.0073	0.0744	0.0000	576.5700
Total	4.7083	9.3018	8.7822	0.0188	7.1204	0.4555	7.5759	0.9574	0.4245	1.3819	0.0000	1,561.910 2	1,561.910 2	0.2729	0.0000	1,567.640 3

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					
2019	0.3261	3.5813	2.7005	4.2000e-003	0.3705	0.1654	0.5359	0.1192	0.1522	0.2714	0.0000	374.2024	374.2024	0.1161	0.0000	376.6414
2020	0.3714	3.1221	3.1874	7.5100e-003	3.3188	0.1609	3.4797	0.3649	0.1510	0.5159	0.0000	612.6997	612.6997	0.0823	0.0000	614.4281
2021	4.0107	2.5983	2.8943	7.0800e-003	3.2093	0.1293	3.3386	0.3528	0.1214	0.4742	0.0000	575.0069	575.0069	0.0744	0.0000	576.5697
Total	4.7083	9.3017	8.7822	0.0188	6.8987	0.4555	7.3542	0.8369	0.4245	1.2614	0.0000	1,561.909 1	1,561.909 1	0.2729	0.0000	1,567.639 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	3.11	0.00	2.93	12.59	0.00	8.72	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	tons/yr										MT/yr					
Area	3.6484	0.0285	2.4695	1.3000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	101.6999	101.6999	5.7900e-003	1.7900e-003	102.3765
Energy	0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	523.4135	523.4135	0.0122	9.8300e-003	526.7173
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	76.2840	0.0000	76.2840	4.5083	0.0000	170.9574
Water						0.0000	0.0000		0.0000	0.0000	8.4505	9.3763	17.8268	0.8695	0.0208	42.5412
Total	3.6998	0.4836	2.7707	2.9400e-003	0.0000	0.0560	0.0560	0.0000	0.0559	0.0559	84.7345	634.4897	719.2242	5.3957	0.0324	842.5924

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	3.6385	0.0285	2.4690	1.3000e-004		0.0136	0.0136		0.0136	0.0136	0.0000	4.0313	4.0313	3.9200e-003	0.0000	4.1136
Energy	0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	523.4135	523.4135	0.0122	9.8300e-003	526.7173
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	76.2840	0.0000	76.2840	4.5083	0.0000	170.9574
Water						0.0000	0.0000		0.0000	0.0000	8.4505	9.3763	17.8268	0.8694	0.0208	42.5300
Total	3.6899	0.4836	2.7702	2.9400e-003	0.0000	0.0492	0.0492	0.0000	0.0492	0.0492	84.7345	536.8211	621.5556	5.3937	0.0306	744.3182

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.27	0.00	0.02	0.00	0.00	12.18	12.18	0.00	12.07	12.07	0.00	15.39	13.58	0.04	5.61	11.66

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	7/1/2019	12/31/2019	5	132	
2	Building Construction	Building Construction	1/1/2020	12/15/2021	5	511	
3	Parking Lot Paving	Paving	1/1/2020	1/14/2020	5	7	
4	Architectural Coating	Architectural Coating	12/16/2021	12/31/2021	5	12	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10.5

Acres of Paving: 0

Residential Indoor: 761,400; Residential Outdoor: 253,800; Non-Residential Indoor: 277,500; Non-Residential Outdoor: 109,854 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	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
Parking Lot Paving	Pavers	2	8.00	125	0.42
Parking Lot Paving	Paving Equipment	2	8.00	130	0.36
Parking Lot 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
Grading	8	20.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	120.00	20.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Parking Lot Paving	6	15.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2019

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					0.4030	0.0000	0.4030	0.2191	0.0000	0.2191	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3228	3.5771	2.6591	4.0700e-003		0.1653	0.1653		0.1521	0.1521	0.0000	365.9099	365.9099	0.1158	0.0000	368.3411
Total	0.3228	3.5771	2.6591	4.0700e-003	0.4030	0.1653	0.5684	0.2191	0.1521	0.3712	0.0000	365.9099	365.9099	0.1158	0.0000	368.3411

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	3.2800e-003	4.2800e-003	0.0414	1.2000e-004	0.1892	7.0000e-005	0.1893	0.0206	7.0000e-005	0.0207	0.0000	8.2930	8.2930	3.7000e-004	0.0000	8.3008
Total	3.2800e-003	4.2800e-003	0.0414	1.2000e-004	0.1892	7.0000e-005	0.1893	0.0206	7.0000e-005	0.0207	0.0000	8.2930	8.2930	3.7000e-004	0.0000	8.3008

3.2 Grading - 2019

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					0.1814	0.0000	0.1814	0.0986	0.0000	0.0986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3228	3.5771	2.6591	4.0700e-003		0.1653	0.1653		0.1521	0.1521	0.0000	365.9094	365.9094	0.1158	0.0000	368.3406
Total	0.3228	3.5771	2.6591	4.0700e-003	0.1814	0.1653	0.3467	0.0986	0.1521	0.2507	0.0000	365.9094	365.9094	0.1158	0.0000	368.3406

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	3.2800e-003	4.2800e-003	0.0414	1.2000e-004	0.1892	7.0000e-005	0.1893	0.0206	7.0000e-005	0.0207	0.0000	8.2930	8.2930	3.7000e-004	0.0000	8.3008
Total	3.2800e-003	4.2800e-003	0.0414	1.2000e-004	0.1892	7.0000e-005	0.1893	0.0206	7.0000e-005	0.0207	0.0000	8.2930	8.2930	3.7000e-004	0.0000	8.3008

3.3 Building Construction - 2020

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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973
Total	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973

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	0.0462	0.5061	0.4583	2.4100e-003	1.0551	0.0105	1.0657	0.1183	9.7000e-003	0.1280	0.0000	205.4511	205.4511	1.3100e-003	0.0000	205.4785
Worker	0.0363	0.0469	0.4533	1.4700e-003	2.2530	8.4000e-004	2.2538	0.2454	7.8000e-004	0.2462	0.0000	94.8441	94.8441	4.1900e-003	0.0000	94.9322
Total	0.0824	0.5530	0.9116	3.8800e-003	3.3081	0.0114	3.3195	0.3637	0.0105	0.3742	0.0000	300.2952	300.2952	5.5000e-003	0.0000	300.4106

3.3 Building Construction - 2020

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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969
Total	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969

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	0.0462	0.5061	0.4583	2.4100e-003	1.0551	0.0105	1.0657	0.1183	9.7000e-003	0.1280	0.0000	205.4511	205.4511	1.3100e-003	0.0000	205.4785
Worker	0.0363	0.0469	0.4533	1.4700e-003	2.2530	8.4000e-004	2.2538	0.2454	7.8000e-004	0.2462	0.0000	94.8441	94.8441	4.1900e-003	0.0000	94.9322
Total	0.0824	0.5530	0.9116	3.8800e-003	3.3081	0.0114	3.3195	0.3637	0.0105	0.3742	0.0000	300.2952	300.2952	5.5000e-003	0.0000	300.4106

3.3 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	0.2357	2.1589	2.0589	3.3400e-003		0.1189	0.1189		0.1118	0.1118	0.0000	287.1932	287.1932	0.0692	0.0000	288.6462
Total	0.2357	2.1589	2.0589	3.3400e-003		0.1189	0.1189		0.1118	0.1118	0.0000	287.1932	287.1932	0.0692	0.0000	288.6462

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	0.0409	0.3874	0.4095	2.2900e-003	1.0028	8.9900e-003	1.0118	0.1125	8.2700e-003	0.1207	0.0000	194.9623	194.9623	1.2200e-003	0.0000	194.9879
Worker	0.0326	0.0416	0.4027	1.4000e-003	2.1412	8.0000e-004	2.1420	0.2332	7.4000e-004	0.2340	0.0000	88.6151	88.6151	3.7900e-003	0.0000	88.6947
Total	0.0735	0.4290	0.8122	3.6900e-003	3.1440	9.7900e-003	3.1538	0.3457	9.0100e-003	0.3547	0.0000	283.5774	283.5774	5.0100e-003	0.0000	283.6826

3.3 Building Construction - 2021

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	0.2357	2.1589	2.0589	3.3400e-003		0.1189	0.1189		0.1118	0.1118	0.0000	287.1929	287.1929	0.0692	0.0000	288.6458
Total	0.2357	2.1589	2.0589	3.3400e-003		0.1189	0.1189		0.1118	0.1118	0.0000	287.1929	287.1929	0.0692	0.0000	288.6458

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	0.0409	0.3874	0.4095	2.2900e-003	1.0028	8.9900e-003	1.0118	0.1125	8.2700e-003	0.1207	0.0000	194.9623	194.9623	1.2200e-003	0.0000	194.9879
Worker	0.0326	0.0416	0.4027	1.4000e-003	2.1412	8.0000e-004	2.1420	0.2332	7.4000e-004	0.2340	0.0000	88.6151	88.6151	3.7900e-003	0.0000	88.6947
Total	0.0735	0.4290	0.8122	3.6900e-003	3.1440	9.7900e-003	3.1538	0.3457	9.0100e-003	0.3547	0.0000	283.5774	283.5774	5.0100e-003	0.0000	283.6826

3.4 Parking Lot Paving - 2020

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	6.6500e-003	0.0689	0.0718	1.1000e-004		3.7000e-003	3.7000e-003		3.4000e-003	3.4000e-003	0.0000	9.8010	9.8010	3.1700e-003	0.0000	0.0000	9.8676
Paving	5.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0123	0.0689	0.0718	1.1000e-004		3.7000e-003	3.7000e-003		3.4000e-003	3.4000e-003	0.0000	9.8010	9.8010	3.1700e-003	0.0000	0.0000	9.8676

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	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	0.0000
Worker	1.7000e-004	2.2000e-004	2.1600e-003	1.0000e-005	0.0108	0.0000	0.0108	1.1700e-003	0.0000	1.1700e-003	0.0000	0.4525	0.4525	2.0000e-005	0.0000	0.0000	0.4529
Total	1.7000e-004	2.2000e-004	2.1600e-003	1.0000e-005	0.0108	0.0000	0.0108	1.1700e-003	0.0000	1.1700e-003	0.0000	0.4525	0.4525	2.0000e-005	0.0000	0.0000	0.4529

3.4 Parking Lot Paving - 2020

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	6.6500e-003	0.0689	0.0718	1.1000e-004		3.7000e-003	3.7000e-003		3.4000e-003	3.4000e-003	0.0000	9.8010	9.8010	3.1700e-003	0.0000	0.0000	9.8676
Paving	5.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0123	0.0689	0.0718	1.1000e-004		3.7000e-003	3.7000e-003		3.4000e-003	3.4000e-003	0.0000	9.8010	9.8010	3.1700e-003	0.0000	0.0000	9.8676

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.7000e-004	2.2000e-004	2.1600e-003	1.0000e-005	0.0108	0.0000	0.0108	1.1700e-003	0.0000	1.1700e-003	0.0000	0.4525	0.4525	2.0000e-005	0.0000	0.0000	0.4529
Total	1.7000e-004	2.2000e-004	2.1600e-003	1.0000e-005	0.0108	0.0000	0.0108	1.1700e-003	0.0000	1.1700e-003	0.0000	0.4525	0.4525	2.0000e-005	0.0000	0.0000	0.4529

3.5 Architectural Coating - 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					
Archit. Coating	3.6993					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	9.1600e-003	0.0109	2.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	1.5320	1.5320	1.1000e-004	0.0000	1.5342
Total	3.7006	9.1600e-003	0.0109	2.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	1.5320	1.5320	1.1000e-004	0.0000	1.5342

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	9.9000e-004	1.2700e-003	0.0123	4.0000e-005	0.0654	2.0000e-005	0.0654	7.1200e-003	2.0000e-005	7.1400e-003	0.0000	2.7047	2.7047	1.2000e-004	0.0000	2.7072
Total	9.9000e-004	1.2700e-003	0.0123	4.0000e-005	0.0654	2.0000e-005	0.0654	7.1200e-003	2.0000e-005	7.1400e-003	0.0000	2.7047	2.7047	1.2000e-004	0.0000	2.7072

3.5 Architectural Coating - 2021

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	3.6993					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	9.1600e-003	0.0109	2.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	1.5320	1.5320	1.1000e-004	0.0000	1.5342
Total	3.7006	9.1600e-003	0.0109	2.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	1.5320	1.5320	1.1000e-004	0.0000	1.5342

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	9.9000e-004	1.2700e-003	0.0123	4.0000e-005	0.0654	2.0000e-005	0.0654	7.1200e-003	2.0000e-005	7.1400e-003	0.0000	2.7047	2.7047	1.2000e-004	0.0000	2.7072
Total	9.9000e-004	1.2700e-003	0.0123	4.0000e-005	0.0654	2.0000e-005	0.0654	7.1200e-003	2.0000e-005	7.1400e-003	0.0000	2.7047	2.7047	1.2000e-004	0.0000	2.7072

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Convenience Market (24 Hour)	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.482049	0.067777	0.150566	0.147114	0.058917	0.006597	0.037288	0.036549	0.000902	0.001873	0.007684	0.000636	0.002049

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14.3718	14.3718	2.4000e-003	5.0000e-004	14.5776
NaturalGas Mitigated	0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	509.0417	509.0417	9.7600e-003	9.3300e-003	512.1397
NaturalGas Unmitigated	0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	509.0417	509.0417	9.7600e-003	9.3300e-003	512.1397
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14.3718	14.3718	2.4000e-003	5.0000e-004	14.5776

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					
Convenience Market (24 Hour)	9000	5.0000e-005	4.4000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4803	0.4803	1.0000e-005	1.0000e-005	0.4832
General Office Building	2.5575e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4779	136.4779	2.6200e-003	2.5000e-003	137.3085
Health Club	90000	4.9000e-004	4.4100e-003	3.7100e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8027	4.8027	9.0000e-005	9.0000e-005	4.8320
High Turnover (Sit Down Restaurant)	63000	3.4000e-004	3.0900e-003	2.5900e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.3619	3.3619	6.0000e-005	6.0000e-005	3.3824
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
Quality Restaurant	18000	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.9606	0.9606	2.0000e-005	2.0000e-005	0.9664
Research & Development	2.5575e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4779	136.4779	2.6200e-003	2.5000e-003	137.3085
Unenclosed Parking Structure	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
Apartments Mid Rise	4.24408e+006	0.0229	0.1956	0.0832	1.2500e-003		0.0158	0.0158		0.0158	0.0158	0.0000	226.4804	226.4804	4.3400e-003	4.1500e-003	227.8587
Total		0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	509.0417	509.0417	9.7600e-003	9.3300e-003	512.1397

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					
Convenience Market (24 Hour)	9000	5.0000e-005	4.4000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4803	0.4803	1.0000e-005	1.0000e-005	0.4832
General Office Building	2.5575e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4779	136.4779	2.6200e-003	2.5000e-003	137.3085
Health Club	90000	4.9000e-004	4.4100e-003	3.7100e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8027	4.8027	9.0000e-005	9.0000e-005	4.8320
High Turnover (Sit Down Restaurant)	63000	3.4000e-004	3.0900e-003	2.5900e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.3619	3.3619	6.0000e-005	6.0000e-005	3.3824
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
Quality Restaurant	18000	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.9606	0.9606	2.0000e-005	2.0000e-005	0.9664
Research & Development	2.5575e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4779	136.4779	2.6200e-003	2.5000e-003	137.3085
Unenclosed Parking Structure	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
Apartments Mid Rise	4.24408e+006	0.0229	0.1956	0.0832	1.2500e-003		0.0158	0.0158		0.0158	0.0158	0.0000	226.4804	226.4804	4.3400e-003	4.1500e-003	227.8587
Total		0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	509.0417	509.0417	9.7600e-003	9.3300e-003	512.1397

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	220920	14.3718	2.4000e-003	5.0000e-004	14.5776
Total		14.3718	2.4000e-003	5.0000e-004	14.5776

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	220920	14.3718	2.4000e-003	5.0000e-004	14.5776
Total		14.3718	2.4000e-003	5.0000e-004	14.5776

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

No Hearths Installed

	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	3.6385	0.0285	2.4690	1.3000e-004		0.0136	0.0136		0.0136	0.0136	0.0000	4.0313	4.0313	3.9200e-003	0.0000	4.1136
Unmitigated	3.6484	0.0285	2.4695	1.3000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	101.6999	101.6999	5.7900e-003	1.7900e-003	102.3765

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	0.3796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8700e-003	0.0000	5.4000e-004	0.0000		6.8200e-003	6.8200e-003		6.7500e-003	6.7500e-003	0.0000	97.6686	97.6686	1.8700e-003	1.7900e-003	98.2630
Landscaping	0.0751	0.0285	2.4690	1.3000e-004		0.0136	0.0136		0.0136	0.0136	0.0000	4.0313	4.0313	3.9200e-003	0.0000	4.1136
Total	3.6484	0.0285	2.4695	1.3000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	101.6999	101.6999	5.7900e-003	1.7900e-003	102.3765

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	0.3796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0751	0.0285	2.4690	1.3000e-004		0.0136	0.0136		0.0136	0.0136	0.0000	4.0313	4.0313	3.9200e-003	0.0000	4.1136
Total	3.6385	0.0285	2.4690	1.3000e-004		0.0136	0.0136		0.0136	0.0136	0.0000	4.0313	4.0313	3.9200e-003	0.0000	4.1136

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Use Grey Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.8268	0.8694	0.0208	42.5300
Unmitigated	17.8268	0.8695	0.0208	42.5412

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.8476 / 0	12.6140	0.6153	0.0147	30.1015
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.39635 / 0	3.6116	0.1762	4.2200e-003	8.6185
Health Club	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.39257 / 0	1.6013	0.0781	1.8700e-003	3.8212
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.8268	0.8695	0.0208	42.5412

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.8476 / 0	12.6140	0.6152	0.0147	30.0936
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.39635 / 0	3.6116	0.1761	4.2100e-003	8.6163
Health Club	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.39257 / 0	1.6013	0.0781	1.8700e-003	3.8202
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.8268	0.8694	0.0208	42.5300

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	76.2840	4.5083	0.0000	170.9574
Unmitigated	76.2840	4.5083	0.0000	170.9574

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	147.66	29.9737	1.7714	0.0000	67.1729
Convenience Market (24 Hour)	3.01	0.6110	0.0361	0.0000	1.3693
General Office Building	76.73	15.5755	0.9205	0.0000	34.9057
Health Club	57	11.5705	0.6838	0.0000	25.9302
High Turnover (Sit Down Restaurant)	83.3	16.9092	0.9993	0.0000	37.8945
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.83	0.3715	0.0220	0.0000	0.8325
Research & Development	6.27	1.2728	0.0752	0.0000	2.8523
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		76.2840	4.5083	0.0000	170.9574

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	147.66	29.9737	1.7714	0.0000	67.1729
Convenience Market (24 Hour)	3.01	0.6110	0.0361	0.0000	1.3693
General Office Building	76.73	15.5755	0.9205	0.0000	34.9057
Health Club	57	11.5705	0.6838	0.0000	25.9302
High Turnover (Sit Down Restaurant)	83.3	16.9092	0.9993	0.0000	37.8945
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.83	0.3715	0.0220	0.0000	0.8325
Research & Development	6.27	1.2728	0.0752	0.0000	2.8523
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		76.2840	4.5083	0.0000	170.9574

9.0 Operational Offroad

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

Nishi Development Project - Phase 2 (Mitigated)
Yolo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	82.50	1000sqft	1.30	82,500.00	0
Research & Development	82.50	1000sqft	1.30	82,500.00	0
Parking Lot	538.00	Space	3.00	215,200.00	0
Unenclosed Parking Structure	210.00	Space	0.00	84,000.00	0
Health Club	10.00	1000sqft	0.00	10,000.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.00	7,000.00	0
Quality Restaurant	2.00	1000sqft	0.00	2,000.00	0
Apartments Mid Rise	331.00	Dwelling Unit	5.00	331,000.00	947
Convenience Market (24 Hour)	1.00	1000sqft	0.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	2			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	143.42	CH4 Intensity (lb/MWhr)	0.024	N2O Intensity (lb/MWhr)	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assumes 33% renewable portfolio standard is achieved by 2019.

Land Use - Lot acreage and sqft based on project description.

Construction Phase - Approximate time of construction

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Local landfill is approximately 10 miles away. Building material will likely come from Sacramento, approximately 30 miles away. Site is relatively flat

On-road Fugitive Dust - Majority of travel will be on paved roads

Demolition -

Grading - Total disturbed acres = total land use acres to be built in this phase

Architectural Coating - Arch Coating sqft corrected using Section 4.7 in Appendix A and Section 7 in Appendix E of the CalEEMod User's Guide

Vehicle Trips - Mobile operational emissions calculated offmodel.

Road Dust - Assume majority paved

Woodstoves - All for sale units have gas fireplace. All rental units have no fireplace. No woodburning.

Area Coating - Non-Residential area painted calculated separately.

Energy Use - Use DEG calculated energy use and offmodel energy emission calculations.

Water And Wastewater - Water usage from Cunningham Engineering, All retail water is apportioned to the restaurant . R&D water use is lumped under general office building. Davis' Water Pollution Control plan is 100% aerobic.

Solid Waste -

Sequestration - Assumption

Construction Off-road Equipment Mitigation -

Area Mitigation - Apply mitigation to reduce annual ROG emissions.

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	137,728.00	109,854.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	413,184.00	277,500.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	223,425.00	253,800.00
tblArchitecturalCoating	ConstArea_Residential_Interior	670,275.00	761,400.00
tblAreaCoating	Area_Nonresidential_Interior	413184	277500
tblAreaCoating	Area_Residential_Exterior	223425	253800
tblAreaCoating	Area_Residential_Interior	670275	761400
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	300.00	511.00
tblConstructionPhase	NumDays	30.00	132.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	PhaseEndDate	1/30/2020	12/31/2021
tblConstructionPhase	PhaseEndDate	12/24/2021	1/14/2020
tblConstructionPhase	PhaseStartDate	1/15/2020	12/16/2021
tblConstructionPhase	PhaseStartDate	12/16/2021	1/1/2020
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	6.65	0.00
tblEnergyUse	LightingElect	3.62	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	LightingElect	8.49	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	8.49	0.00
tblEnergyUse	LightingElect	3.01	0.00
tblEnergyUse	NT24E	2,554.47	0.00
tblEnergyUse	NT24E	1.98	0.00
tblEnergyUse	NT24E	3.62	0.00
tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24E	17.72	0.00
tblEnergyUse	NT24E	17.72	0.00

tblEnergyUse	NT24E	4.20	0.00
tblEnergyUse	NT24NG	1,716.22	0.00
tblEnergyUse	NT24NG	0.36	0.00
tblEnergyUse	NT24NG	0.47	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	68.83	0.00
tblEnergyUse	NT24NG	68.83	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	T24E	322.48	0.00
tblEnergyUse	T24E	4.76	0.00
tblEnergyUse	T24E	3.93	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24E	7.40	0.00
tblEnergyUse	T24E	7.40	0.00
tblEnergyUse	T24E	2.02	0.00
tblEnergyUse	T24NG	8,261.25	12,822.00
tblEnergyUse	T24NG	11.93	9.00
tblEnergyUse	T24NG	16.83	31.00
tblEnergyUse	T24NG	19.55	9.00
tblEnergyUse	T24NG	42.71	9.00
tblEnergyUse	T24NG	42.71	9.00
tblEnergyUse	T24NG	19.55	31.00
tblFireplaces	FireplaceWoodMass	4,558.40	0.00
tblFireplaces	NumberGas	182.05	124.00
tblFireplaces	NumberNoFireplace	33.10	197.00
tblFireplaces	NumberWood	115.85	0.00
tblGrading	AcresOfGrading	330.00	10.50
tblLandUse	LotAcreage	1.89	1.30

tblLandUse	LotAcreage	1.89	1.30
tblLandUse	LotAcreage	4.84	3.00
tblLandUse	LotAcreage	1.89	0.00
tblLandUse	LotAcreage	0.23	0.00
tblLandUse	LotAcreage	0.16	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	8.71	5.00
tblLandUse	LotAcreage	0.02	0.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	HaulingPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	VendorPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblOnRoadDust	WorkerPercentPave	94.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	641.35	143.42
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2022
tblRoadDust	RoadPercentPave	94	99
tblSolidWaste	SolidWasteGenerationRate	152.26	147.66
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00

tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripLength	7.30	30.00
tblTripsAndVMT	VendorTripNumber	115.00	20.00
tblTripsAndVMT	WorkerTripNumber	425.00	120.00
tblTripsAndVMT	WorkerTripNumber	85.00	76.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	11.01	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	127.15	0.00

tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	21,565,982.48	18,847,554.00
tblWater	IndoorWaterUseRate	74,072.52	0.00
tblWater	IndoorWaterUseRate	14,663,034.21	5,396,345.00
tblWater	IndoorWaterUseRate	591,431.44	0.00
tblWater	IndoorWaterUseRate	2,124,735.99	0.00
tblWater	IndoorWaterUseRate	607,067.42	2,392,575.00
tblWater	IndoorWaterUseRate	40,564,750.64	0.00
tblWater	OutdoorWaterUseRate	13,595,945.48	0.00
tblWater	OutdoorWaterUseRate	45,399.29	0.00
tblWater	OutdoorWaterUseRate	8,987,020.97	0.00
tblWater	OutdoorWaterUseRate	362,490.24	0.00
tblWater	OutdoorWaterUseRate	135,621.45	0.00
tblWater	OutdoorWaterUseRate	38,748.98	0.00
tblWoodstoves	NumberCatalytic	16.55	16.05
tblWoodstoves	NumberNoncatalytic	16.55	16.05
tblWoodstoves	WoodstoveWoodMass	4,558.40	0.00

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					
2019	0.3261	3.5813	2.7005	4.2000e-003	0.5922	0.1654	0.7576	0.2397	0.1522	0.3919	0.0000	374.2029	374.2029	0.1161	0.0000	376.6419
2020	0.3714	3.1221	3.1874	7.5100e-003	3.3188	0.1609	3.4797	0.3649	0.1510	0.5159	0.0000	612.7001	612.7001	0.0823	0.0000	614.4284
2021	4.0107	2.5983	2.8943	7.0800e-003	3.2093	0.1293	3.3386	0.3528	0.1214	0.4742	0.0000	575.0073	575.0073	0.0744	0.0000	576.5700
Total	4.7083	9.3018	8.7822	0.0188	7.1204	0.4555	7.5759	0.9574	0.4245	1.3819	0.0000	1,561.910 2	1,561.910 2	0.2729	0.0000	1,567.640 3

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					
2019	0.3261	3.5813	2.7005	4.2000e-003	0.3705	0.1654	0.5359	0.1192	0.1522	0.2714	0.0000	374.2024	374.2024	0.1161	0.0000	376.6414
2020	0.3714	3.1221	3.1874	7.5100e-003	3.3188	0.1609	3.4797	0.3649	0.1510	0.5159	0.0000	612.6997	612.6997	0.0823	0.0000	614.4281
2021	4.0107	2.5983	2.8943	7.0800e-003	3.2093	0.1293	3.3386	0.3528	0.1214	0.4742	0.0000	575.0069	575.0069	0.0744	0.0000	576.5697
Total	4.7083	9.3017	8.7822	0.0188	6.8987	0.4555	7.3542	0.8369	0.4245	1.2614	0.0000	1,561.909 1	1,561.909 1	0.2729	0.0000	1,567.639 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	3.11	0.00	2.93	12.59	0.00	8.72	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	tons/yr										MT/yr					
Area	3.6484	0.0285	2.4695	1.3000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	101.6999	101.6999	5.7900e-003	1.7900e-003	102.3765
Energy	0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	523.4135	523.4135	0.0122	9.8300e-003	526.7173
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	76.2840	0.0000	76.2840	4.5083	0.0000	170.9574
Water						0.0000	0.0000		0.0000	0.0000	8.4505	9.3763	17.8268	0.8695	0.0208	42.5412
Total	3.6998	0.4836	2.7707	2.9400e-003	0.0000	0.0560	0.0560	0.0000	0.0559	0.0559	84.7345	634.4897	719.2242	5.3957	0.0324	842.5924

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	3.3828	0.0255	2.1718	1.1000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	3.4248	3.4248	2.9800e-003	0.0000	3.4874
Energy	0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	523.4135	523.4135	0.0122	9.8300e-003	526.7173
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	76.2840	0.0000	76.2840	4.5083	0.0000	170.9574
Water						0.0000	0.0000		0.0000	0.0000	8.4505	9.3763	17.8268	0.8694	0.0208	42.5300
Total	3.4342	0.4806	2.4731	2.9200e-003	0.0000	0.0474	0.0474	0.0000	0.0474	0.0474	84.7345	536.2146	620.9491	5.3928	0.0306	743.6920

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.18	0.62	10.74	0.68	0.00	15.29	15.29	0.00	15.19	15.19	0.00	15.49	13.66	0.05	5.61	11.74

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	7/1/2019	12/31/2019	5	132	
2	Building Construction	Building Construction	1/1/2020	12/15/2021	5	511	
3	Parking Lot Paving	Paving	1/1/2020	1/14/2020	5	7	
4	Architectural Coating	Architectural Coating	12/16/2021	12/31/2021	5	12	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10.5

Acres of Paving: 0

Residential Indoor: 761,400; Residential Outdoor: 253,800; Non-Residential Indoor: 277,500; Non-Residential Outdoor: 109,854 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	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
Parking Lot Paving	Pavers	2	8.00	125	0.42
Parking Lot Paving	Paving Equipment	2	8.00	130	0.36
Parking Lot 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
Grading	8	20.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	120.00	20.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Parking Lot Paving	6	15.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	76.00	0.00	0.00	10.80	30.00	10.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2019

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					0.4030	0.0000	0.4030	0.2191	0.0000	0.2191	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3228	3.5771	2.6591	4.0700e-003		0.1653	0.1653		0.1521	0.1521	0.0000	365.9099	365.9099	0.1158	0.0000	368.3411
Total	0.3228	3.5771	2.6591	4.0700e-003	0.4030	0.1653	0.5684	0.2191	0.1521	0.3712	0.0000	365.9099	365.9099	0.1158	0.0000	368.3411

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	3.2800e-003	4.2800e-003	0.0414	1.2000e-004	0.1892	7.0000e-005	0.1893	0.0206	7.0000e-005	0.0207	0.0000	8.2930	8.2930	3.7000e-004	0.0000	8.3008
Total	3.2800e-003	4.2800e-003	0.0414	1.2000e-004	0.1892	7.0000e-005	0.1893	0.0206	7.0000e-005	0.0207	0.0000	8.2930	8.2930	3.7000e-004	0.0000	8.3008

3.2 Grading - 2019

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					0.1814	0.0000	0.1814	0.0986	0.0000	0.0986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3228	3.5771	2.6591	4.0700e-003		0.1653	0.1653		0.1521	0.1521	0.0000	365.9094	365.9094	0.1158	0.0000	368.3406
Total	0.3228	3.5771	2.6591	4.0700e-003	0.1814	0.1653	0.3467	0.0986	0.1521	0.2507	0.0000	365.9094	365.9094	0.1158	0.0000	368.3406

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	3.2800e-003	4.2800e-003	0.0414	1.2000e-004	0.1892	7.0000e-005	0.1893	0.0206	7.0000e-005	0.0207	0.0000	8.2930	8.2930	3.7000e-004	0.0000	8.3008
Total	3.2800e-003	4.2800e-003	0.0414	1.2000e-004	0.1892	7.0000e-005	0.1893	0.0206	7.0000e-005	0.0207	0.0000	8.2930	8.2930	3.7000e-004	0.0000	8.3008

3.3 Building Construction - 2020

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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973
Total	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1514	302.1514	0.0736	0.0000	303.6973

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	0.0462	0.5061	0.4583	2.4100e-003	1.0551	0.0105	1.0657	0.1183	9.7000e-003	0.1280	0.0000	205.4511	205.4511	1.3100e-003	0.0000	205.4785
Worker	0.0363	0.0469	0.4533	1.4700e-003	2.2530	8.4000e-004	2.2538	0.2454	7.8000e-004	0.2462	0.0000	94.8441	94.8441	4.1900e-003	0.0000	94.9322
Total	0.0824	0.5530	0.9116	3.8800e-003	3.3081	0.0114	3.3195	0.3637	0.0105	0.3742	0.0000	300.2952	300.2952	5.5000e-003	0.0000	300.4106

3.3 Building Construction - 2020

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	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969
Total	0.2766	2.5000	2.2019	3.5100e-003		0.1458	0.1458		0.1371	0.1371	0.0000	302.1510	302.1510	0.0736	0.0000	303.6969

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	0.0462	0.5061	0.4583	2.4100e-003	1.0551	0.0105	1.0657	0.1183	9.7000e-003	0.1280	0.0000	205.4511	205.4511	1.3100e-003	0.0000	205.4785
Worker	0.0363	0.0469	0.4533	1.4700e-003	2.2530	8.4000e-004	2.2538	0.2454	7.8000e-004	0.2462	0.0000	94.8441	94.8441	4.1900e-003	0.0000	94.9322
Total	0.0824	0.5530	0.9116	3.8800e-003	3.3081	0.0114	3.3195	0.3637	0.0105	0.3742	0.0000	300.2952	300.2952	5.5000e-003	0.0000	300.4106

3.3 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	0.2357	2.1589	2.0589	3.3400e-003		0.1189	0.1189		0.1118	0.1118	0.0000	287.1932	287.1932	0.0692	0.0000	288.6462
Total	0.2357	2.1589	2.0589	3.3400e-003		0.1189	0.1189		0.1118	0.1118	0.0000	287.1932	287.1932	0.0692	0.0000	288.6462

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	0.0409	0.3874	0.4095	2.2900e-003	1.0028	8.9900e-003	1.0118	0.1125	8.2700e-003	0.1207	0.0000	194.9623	194.9623	1.2200e-003	0.0000	194.9879
Worker	0.0326	0.0416	0.4027	1.4000e-003	2.1412	8.0000e-004	2.1420	0.2332	7.4000e-004	0.2340	0.0000	88.6151	88.6151	3.7900e-003	0.0000	88.6947
Total	0.0735	0.4290	0.8122	3.6900e-003	3.1440	9.7900e-003	3.1538	0.3457	9.0100e-003	0.3547	0.0000	283.5774	283.5774	5.0100e-003	0.0000	283.6826

3.3 Building Construction - 2021

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	0.2357	2.1589	2.0589	3.3400e-003		0.1189	0.1189		0.1118	0.1118	0.0000	287.1929	287.1929	0.0692	0.0000	288.6458
Total	0.2357	2.1589	2.0589	3.3400e-003		0.1189	0.1189		0.1118	0.1118	0.0000	287.1929	287.1929	0.0692	0.0000	288.6458

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	0.0409	0.3874	0.4095	2.2900e-003	1.0028	8.9900e-003	1.0118	0.1125	8.2700e-003	0.1207	0.0000	194.9623	194.9623	1.2200e-003	0.0000	194.9879
Worker	0.0326	0.0416	0.4027	1.4000e-003	2.1412	8.0000e-004	2.1420	0.2332	7.4000e-004	0.2340	0.0000	88.6151	88.6151	3.7900e-003	0.0000	88.6947
Total	0.0735	0.4290	0.8122	3.6900e-003	3.1440	9.7900e-003	3.1538	0.3457	9.0100e-003	0.3547	0.0000	283.5774	283.5774	5.0100e-003	0.0000	283.6826

3.4 Parking Lot Paving - 2020

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	6.6500e-003	0.0689	0.0718	1.1000e-004		3.7000e-003	3.7000e-003		3.4000e-003	3.4000e-003	0.0000	9.8010	9.8010	3.1700e-003	0.0000	0.0000	9.8676
Paving	5.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0123	0.0689	0.0718	1.1000e-004		3.7000e-003	3.7000e-003		3.4000e-003	3.4000e-003	0.0000	9.8010	9.8010	3.1700e-003	0.0000	0.0000	9.8676

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.7000e-004	2.2000e-004	2.1600e-003	1.0000e-005	0.0108	0.0000	0.0108	1.1700e-003	0.0000	1.1700e-003	0.0000	0.4525	0.4525	2.0000e-005	0.0000	0.0000	0.4529
Total	1.7000e-004	2.2000e-004	2.1600e-003	1.0000e-005	0.0108	0.0000	0.0108	1.1700e-003	0.0000	1.1700e-003	0.0000	0.4525	0.4525	2.0000e-005	0.0000	0.0000	0.4529

3.4 Parking Lot Paving - 2020

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	6.6500e-003	0.0689	0.0718	1.1000e-004		3.7000e-003	3.7000e-003		3.4000e-003	3.4000e-003	0.0000	9.8010	9.8010	3.1700e-003	0.0000	9.8676
Paving	5.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0123	0.0689	0.0718	1.1000e-004		3.7000e-003	3.7000e-003		3.4000e-003	3.4000e-003	0.0000	9.8010	9.8010	3.1700e-003	0.0000	9.8676

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.2000e-004	2.1600e-003	1.0000e-005	0.0108	0.0000	0.0108	1.1700e-003	0.0000	1.1700e-003	0.0000	0.4525	0.4525	2.0000e-005	0.0000	0.4529
Total	1.7000e-004	2.2000e-004	2.1600e-003	1.0000e-005	0.0108	0.0000	0.0108	1.1700e-003	0.0000	1.1700e-003	0.0000	0.4525	0.4525	2.0000e-005	0.0000	0.4529

3.5 Architectural Coating - 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					
Archit. Coating	3.6993					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	9.1600e-003	0.0109	2.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	1.5320	1.5320	1.1000e-004	0.0000	1.5342
Total	3.7006	9.1600e-003	0.0109	2.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	1.5320	1.5320	1.1000e-004	0.0000	1.5342

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	9.9000e-004	1.2700e-003	0.0123	4.0000e-005	0.0654	2.0000e-005	0.0654	7.1200e-003	2.0000e-005	7.1400e-003	0.0000	2.7047	2.7047	1.2000e-004	0.0000	2.7072
Total	9.9000e-004	1.2700e-003	0.0123	4.0000e-005	0.0654	2.0000e-005	0.0654	7.1200e-003	2.0000e-005	7.1400e-003	0.0000	2.7047	2.7047	1.2000e-004	0.0000	2.7072

3.5 Architectural Coating - 2021

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	3.6993					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	9.1600e-003	0.0109	2.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	1.5320	1.5320	1.1000e-004	0.0000	1.5342
Total	3.7006	9.1600e-003	0.0109	2.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	1.5320	1.5320	1.1000e-004	0.0000	1.5342

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	9.9000e-004	1.2700e-003	0.0123	4.0000e-005	0.0654	2.0000e-005	0.0654	7.1200e-003	2.0000e-005	7.1400e-003	0.0000	2.7047	2.7047	1.2000e-004	0.0000	2.7072
Total	9.9000e-004	1.2700e-003	0.0123	4.0000e-005	0.0654	2.0000e-005	0.0654	7.1200e-003	2.0000e-005	7.1400e-003	0.0000	2.7047	2.7047	1.2000e-004	0.0000	2.7072

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Convenience Market (24 Hour)	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.482049	0.067777	0.150566	0.147114	0.058917	0.006597	0.037288	0.036549	0.000902	0.001873	0.007684	0.000636	0.002049

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14.3718	14.3718	2.4000e-003	5.0000e-004	14.5776
NaturalGas Mitigated	0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	509.0417	509.0417	9.7600e-003	9.3300e-003	512.1397
NaturalGas Unmitigated	0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	509.0417	509.0417	9.7600e-003	9.3300e-003	512.1397
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14.3718	14.3718	2.4000e-003	5.0000e-004	14.5776

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					
Convenience Market (24 Hour)	9000	5.0000e-005	4.4000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4803	0.4803	1.0000e-005	1.0000e-005	0.4832
General Office Building	2.5575e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4779	136.4779	2.6200e-003	2.5000e-003	137.3085
Health Club	90000	4.9000e-004	4.4100e-003	3.7100e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8027	4.8027	9.0000e-005	9.0000e-005	4.8320
High Turnover (Sit Down Restaurant)	63000	3.4000e-004	3.0900e-003	2.5900e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.3619	3.3619	6.0000e-005	6.0000e-005	3.3824
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
Quality Restaurant	18000	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.9606	0.9606	2.0000e-005	2.0000e-005	0.9664
Research & Development	2.5575e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4779	136.4779	2.6200e-003	2.5000e-003	137.3085
Unenclosed Parking Structure	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
Apartments Mid Rise	4.24408e+006	0.0229	0.1956	0.0832	1.2500e-003		0.0158	0.0158		0.0158	0.0158	0.0000	226.4804	226.4804	4.3400e-003	4.1500e-003	227.8587
Total		0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	509.0417	509.0417	9.7600e-003	9.3300e-003	512.1397

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					
Convenience Market (24 Hour)	9000	5.0000e-005	4.4000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4803	0.4803	1.0000e-005	1.0000e-005	0.4832
General Office Building	2.5575e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4779	136.4779	2.6200e-003	2.5000e-003	137.3085
Health Club	90000	4.9000e-004	4.4100e-003	3.7100e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8027	4.8027	9.0000e-005	9.0000e-005	4.8320
High Turnover (Sit Down Restaurant)	63000	3.4000e-004	3.0900e-003	2.5900e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.3619	3.3619	6.0000e-005	6.0000e-005	3.3824
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
Quality Restaurant	18000	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.9606	0.9606	2.0000e-005	2.0000e-005	0.9664
Research & Development	2.5575e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4779	136.4779	2.6200e-003	2.5000e-003	137.3085
Unenclosed Parking Structure	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
Apartments Mid Rise	4.24408e+006	0.0229	0.1956	0.0832	1.2500e-003		0.0158	0.0158		0.0158	0.0158	0.0000	226.4804	226.4804	4.3400e-003	4.1500e-003	227.8587
Total		0.0514	0.4551	0.3013	2.8100e-003		0.0355	0.0355		0.0355	0.0355	0.0000	509.0417	509.0417	9.7600e-003	9.3300e-003	512.1397

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	220920	14.3718	2.4000e-003	5.0000e-004	14.5776
Total		14.3718	2.4000e-003	5.0000e-004	14.5776

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 Hour)	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Research & Development	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	220920	14.3718	2.4000e-003	5.0000e-004	14.5776
Total		14.3718	2.4000e-003	5.0000e-004	14.5776

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use only Natural Gas Hearths
- No Hearths Installed
- Use Low VOC Cleaning Supplies

	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	3.3828	0.0255	2.1718	1.1000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	3.4248	3.4248	2.9800e-003	0.0000	3.4874
Unmitigated	3.6484	0.0285	2.4695	1.3000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	101.6999	101.6999	5.7900e-003	1.7900e-003	102.3765

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	0.3796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1838					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8700e-003	0.0000	5.4000e-004	0.0000		6.8200e-003	6.8200e-003		6.7500e-003	6.7500e-003	0.0000	97.6686	97.6686	1.8700e-003	1.7900e-003	98.2630
Landscaping	0.0751	0.0285	2.4690	1.3000e-004		0.0136	0.0136		0.0136	0.0136	0.0000	4.0313	4.0313	3.9200e-003	0.0000	4.1136
Total	3.6484	0.0285	2.4695	1.3000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	101.6999	101.6999	5.7900e-003	1.7900e-003	102.3765

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	0.3796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.9457					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0574	0.0255	2.1718	1.1000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	3.4248	3.4248	2.9800e-003	0.0000	3.4874
Total	3.3828	0.0255	2.1718	1.1000e-004		0.0119	0.0119		0.0119	0.0119	0.0000	3.4248	3.4248	2.9800e-003	0.0000	3.4874

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Use Grey Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.8268	0.8694	0.0208	42.5300
Unmitigated	17.8268	0.8695	0.0208	42.5412

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.8476 / 0	12.6140	0.6153	0.0147	30.1015
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.39635 / 0	3.6116	0.1762	4.2200e-003	8.6185
Health Club	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.39257 / 0	1.6013	0.0781	1.8700e-003	3.8212
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.8268	0.8695	0.0208	42.5412

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	18.8476 / 0	12.6140	0.6152	0.0147	30.0936
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	5.39635 / 0	3.6116	0.1761	4.2100e-003	8.6163
Health Club	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.39257 / 0	1.6013	0.0781	1.8700e-003	3.8202
Research & Development	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.8268	0.8694	0.0208	42.5300

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	76.2840	4.5083	0.0000	170.9574
Unmitigated	76.2840	4.5083	0.0000	170.9574

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	147.66	29.9737	1.7714	0.0000	67.1729
Convenience Market (24 Hour)	3.01	0.6110	0.0361	0.0000	1.3693
General Office Building	76.73	15.5755	0.9205	0.0000	34.9057
Health Club	57	11.5705	0.6838	0.0000	25.9302
High Turnover (Sit Down Restaurant)	83.3	16.9092	0.9993	0.0000	37.8945
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.83	0.3715	0.0220	0.0000	0.8325
Research & Development	6.27	1.2728	0.0752	0.0000	2.8523
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		76.2840	4.5083	0.0000	170.9574

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	147.66	29.9737	1.7714	0.0000	67.1729
Convenience Market (24 Hour)	3.01	0.6110	0.0361	0.0000	1.3693
General Office Building	76.73	15.5755	0.9205	0.0000	34.9057
Health Club	57	11.5705	0.6838	0.0000	25.9302
High Turnover (Sit Down Restaurant)	83.3	16.9092	0.9993	0.0000	37.8945
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.83	0.3715	0.0220	0.0000	0.8325
Research & Development	6.27	1.2728	0.0752	0.0000	2.8523
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		76.2840	4.5083	0.0000	170.9574

9.0 Operational Offroad

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

Diesel PM Risk Estimates

Diesel PM-Related Cancer Risk on the Nishi Site

	<u>value</u>	<u>units</u>	<u>source</u>
calendar year when air monitoring performed on Nishi site	2015	calendar year	Source 1
Total SOx Emiss from diesel and gas vehicles at freeway travel speeds in Yolo County	0.01314	tons/day	wksht: processed EMFAC output
Note: All of the SOx listed in EMFAC output is assumed to be SO2, according to ARB staff			
Total Diesel PM Emissions at freeway travel speeds in Yolo County	0.01811	tons/day	wksht: processed EMFAC output
atomic mass of Sulfur	32.06	AMU	http://www.ciaaw.org/sulfur.htm
atomic mass of Oxygen	15.999	AMU	http://www.ciaaw.org/oxygen.htm
atomic mass of SOx (SO2)	64.058	AMU	chemistry calculation
portion of SOx (SO2) mass that is sulfur, by mass	50.0%	%	calculation
Sulfur, elemental, emitted by freeway travel in Yolo County	0.00657	tons/day	calculation
Ratio of sulfur to diesel PM emitted from Yolo County freeway travel speeds	36.3%	%	calculation
Average concentration of Sulfur measured at Nishi site	205.97	ng/m ³	Oldr_Elements_data.xlsx, sheet "Averages" cell P:21 of Source 1; Note 4
mass conversion rate	1,000	ng/ug	www.unitconversion.org/weight/micrograms-to-nanograms-conversion.html
Average concentration of Sulfur measured at Nishi site	0.206	ug/m ³	conversion calculator
Average concentration of diesel PM	0.57	ug/m ³	calculation
Cancer risk multiplier for diesel PM	414.53	unitless	SJVAPCD guidance
Cancer risk from diesel PM eposure on Nishi site	235	chances per 1 million	calculation

Sources/Notes

- 1 Barnes, David E. 2015 (April 25). Final Report of Nishi Property Particulate Measurements. University of California, Davis, Department of Physics, Davis, CA.
- 2 EMFAC Team, California Air Resources Board. 2015 (June 15). E-mail correspondence with Austin Kerr of Ascent Environmental regarding SOx emissions estimates in EMFAC2014.
- 3 Diesel engine power is directly controlled by the fuel supply, not by control of the air/fuel mixture as in conventional gasoline engines. https://en.wikipedia.org/wiki/Diesel_exhaust
- 4 It's important to note that the average concentration of Sulfur measured at the Nishi site is based only on measurements collected between February 3 and February 13, 2015. It is not considered to be an annual average or any type of long-term average. Some variability in wind speed and direction was observed during the 10-day measurement period. The measured average informs what the annual average might be to the extent that the variability in meteorological conditions during the measurement period are representative of the variability in meteorological conditions over the long term.

Application of SMAQMD's Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, Version 2.4 (SMAQMD 2011)

Source: Sacramento Metropolitan Air Quality Management District. 2011 (March). Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, Version 2.4. Available at <http://www.airquality.org/ceqa/SLUMajorRoadway/SLURecommendedProtoco2.4-Jan2011.pdf>. Accessed May 27, 2015.

	<u>value</u>	<u>units</u>	<u>source</u>
hourly traffic volumes on I-80			
morning, east-bound	4,250	veh/hr	Fehr & Peers traffic data
morning, west-bound	4,310	veh/hr	Fehr & Peers traffic data
morning, both directions	8,560	veh/hr	summation
evening, east-bound	4,730	veh/hr	Fehr & Peers traffic data
evening, west-bound	4,460	veh/hr	Fehr & Peers traffic data
evening, both directions	9,190	veh/hr	summation
peak hour, both directions	9,190	veh/hr	max calculation
general orientation of I-80	east west	N/A	google maps
side of I-80 where Nishi site is located	north side	N/A	google maps
applicable lookup table in SMAQMD's Protocol	Table 1, p. 9	N/A	SMAQMD 2011:9
approximate distance from edge of I-80 of Barnes's pollutant measurements	295	feet	Barnes 2015, Figure 2 on p. 5
Diesel PM Cancer Risk at measurement location	197	chances per 1 million	SMAQMD 2011, Table 1 on p. 9

Summary of EMFAC2014 Output

Model Run Parameters

calendar_year 2015
 season_month Annual
 sub_area Yolo (SV)
 process RUNEX
 Source: wksht Nishi_Default_YoloSV_2015_Annua

	<u>value</u>	<u>units</u>	<u>source</u>
Total SOx Emissions from diesel and gasoline vehicles at freeway travel speeds in Yolo County	0.01314	tons/day	summation
Total Diesel PM Emissions (from diesel vehicles) at freeway travel speeds in Yolo County	0.01811	tons/day	summation

vehicle_class	fuel	speed	pollutant	emission
LDA	Gas	70	SOx	0.001813484
LDT1	Gas	70	SOx	0.000237885
LDT2	Gas	70	SOx	0.001046174
MDV	Gas	70	SOx	0.001041622
MCY	Gas	70	SOx	1.81E-05
LDA	Gas	65	SOx	0.000170015
LDT1	Gas	65	SOx	2.23E-05
LDT2	Gas	65	SOx	9.81E-05
MDV	Gas	65	SOx	9.77E-05
T6TS	Gas	65	SOx	3.06E-06
T7IS	Gas	65	SOx	7.04E-07
UBUS	Gas	65	SOx	1.98E-07
OBUS	Gas	65	SOx	1.13E-06
MCY	Gas	65	SOx	1.68E-06
MH	Gas	65	SOx	1.45E-06
LDA	Gas	60	SOx	0.00165629
LDT1	Gas	60	SOx	0.000217347
LDT2	Gas	60	SOx	0.000955612
MDV	Gas	60	SOx	0.000951535
T6TS	Gas	60	SOx	1.92E-05
T7IS	Gas	60	SOx	1.31E-06
UBUS	Gas	60	SOx	1.29E-06
SBUS	Gas	60	SOx	2.35E-07
OBUS	Gas	60	SOx	7.09E-06
MCY	Gas	60	SOx	1.61E-05
MH	Gas	60	SOx	9.08E-06
LDA	Gas	55	SOx	0.001222183
LDT1	Gas	55	SOx	0.000160379
LDT2	Gas	55	SOx	0.000705105
MDV	Gas	55	SOx	0.000702094

LHD1	Gas	55	SOx	3.38E-05
LHD2	Gas	55	SOx	4.81E-06
T6TS	Gas	55	SOx	1.65E-05
T7IS	Gas	55	SOx	5.34E-06
UBUS	Gas	55	SOx	8.42E-07
SBUS	Gas	55	SOx	4.21E-07
OBUS	Gas	55	SOx	6.11E-06
MCY	Gas	55	SOx	1.17E-05
MH	Gas	55	SOx	7.80E-06
LDA	Gas	70	PM10	0.00093423
LDT1	Gas	70	PM10	0.000196139
LDT2	Gas	70	PM10	0.000343876
MDV	Gas	70	PM10	0.000281059
MCY	Gas	70	PM10	1.48E-05
LDA	Gas	65	PM10	8.67E-05
LDT1	Gas	65	PM10	1.83E-05
LDT2	Gas	65	PM10	3.19E-05
MDV	Gas	65	PM10	2.61E-05
T6TS	Gas	65	PM10	8.10E-07
T7IS	Gas	65	PM10	1.16E-07
UBUS	Gas	65	PM10	5.88E-08
OBUS	Gas	65	PM10	1.10E-07
MCY	Gas	65	PM10	1.37E-06
MH	Gas	65	PM10	4.89E-07
LDA	Gas	60	PM10	0.000839346
LDT1	Gas	60	PM10	0.000179234
LDT2	Gas	60	PM10	0.000309626
MDV	Gas	60	PM10	0.000253649
T6TS	Gas	60	PM10	4.55E-06
T7IS	Gas	60	PM10	1.88E-07
UBUS	Gas	60	PM10	3.42E-07
SBUS	Gas	60	PM10	7.39E-08
OBUS	Gas	60	PM10	6.19E-07
MCY	Gas	60	PM10	1.30E-05
MH	Gas	60	PM10	2.74E-06
LDA	Gas	55	PM10	0.000620873
LDT1	Gas	55	PM10	0.000133685
LDT2	Gas	55	PM10	0.000229415
MDV	Gas	55	PM10	0.000188122
LHD1	Gas	55	PM10	5.62E-06
LHD2	Gas	55	PM10	5.28E-07
T6TS	Gas	55	PM10	3.63E-06
T7IS	Gas	55	PM10	6.99E-07
UBUS	Gas	55	PM10	2.07E-07
SBUS	Gas	55	PM10	1.24E-07
OBUS	Gas	55	PM10	4.97E-07
MCY	Gas	55	PM10	9.46E-06

MH	Gas	55	PM10	2.18E-06
LDA	Dsl	70	SOx	1.60E-05
LDT1	Dsl	70	SOx	5.37E-07
LDT2	Dsl	70	SOx	9.83E-07
MDV	Dsl	70	SOx	9.59E-06
T6 Ag	Dsl	70	SOx	0
T6 Public	Dsl	70	SOx	0
T6 CAIRP Small	Dsl	70	SOx	0
T6 CAIRP Heavy	Dsl	70	SOx	0
T6 Instate Construction Small	Dsl	70	SOx	0
T6 Instate Construction Heavy	Dsl	70	SOx	0
T6 Instate Small	Dsl	70	SOx	0
T6 Instate Heavy	Dsl	70	SOx	0
T6 OOS Small	Dsl	70	SOx	0
T6 OOS Heavy	Dsl	70	SOx	0
T6 Utility	Dsl	70	SOx	0
T7 Ag	Dsl	70	SOx	0
T7 Public	Dsl	70	SOx	0
T7 CAIRP	Dsl	70	SOx	0
T7 CAIRP Construction	Dsl	70	SOx	0
T7 Utility	Dsl	70	SOx	0
T7 NNOOS	Dsl	70	SOx	0
T7 NOOS	Dsl	70	SOx	0
T7 Other Port	Dsl	70	SOx	0
T7 POAK	Dsl	70	SOx	0
T7 Single	Dsl	70	SOx	0
T7 Single Construction	Dsl	70	SOx	0
T7 Tractor	Dsl	70	SOx	0
T7 Tractor Construction	Dsl	70	SOx	0
T7 SWCV	Dsl	70	SOx	0
SBUS	Dsl	70	SOx	0
Motor Coach	Dsl	70	SOx	0
All Other Buses	Dsl	70	SOx	0
LDA	Dsl	65	SOx	1.49E-06
LDT1	Dsl	65	SOx	5.01E-08
LDT2	Dsl	65	SOx	9.15E-08
MDV	Dsl	65	SOx	8.95E-07
UBUS	Dsl	65	SOx	3.61E-07
MH	Dsl	65	SOx	4.21E-07
T6 Ag	Dsl	65	SOx	1.61E-06
T6 Public	Dsl	65	SOx	7.39E-07
T6 CAIRP Small	Dsl	65	SOx	6.13E-07
T6 CAIRP Heavy	Dsl	65	SOx	1.94E-07
T6 Instate Construction Small	Dsl	65	SOx	4.22E-06
T6 Instate Construction Heavy	Dsl	65	SOx	6.44E-07
T6 Instate Small	Dsl	65	SOx	4.19E-05
T6 Instate Heavy	Dsl	65	SOx	1.39E-05

T6 OOS Small	Dsl	65	SOx	3.51E-07
T6 OOS Heavy	Dsl	65	SOx	1.12E-07
T6 Utility	Dsl	65	SOx	2.44E-07
T7 Ag	Dsl	65	SOx	9.32E-07
T7 Public	Dsl	65	SOx	3.44E-06
T7 CAIRP	Dsl	65	SOx	2.16E-05
T7 CAIRP Construction	Dsl	65	SOx	8.25E-07
T7 Utility	Dsl	65	SOx	9.07E-08
T7 NNOOS	Dsl	65	SOx	2.58E-05
T7 NOOS	Dsl	65	SOx	8.52E-06
T7 Other Port	Dsl	65	SOx	2.62E-07
T7 POAK	Dsl	65	SOx	5.07E-07
T7 Single	Dsl	65	SOx	1.85E-05
T7 Single Construction	Dsl	65	SOx	2.13E-06
T7 Tractor	Dsl	65	SOx	1.45E-05
T7 Tractor Construction	Dsl	65	SOx	1.59E-06
T7 SWCV	Dsl	65	SOx	0
SBUS	Dsl	65	SOx	0
Motor Coach	Dsl	65	SOx	2.10E-07
All Other Buses	Dsl	65	SOx	2.61E-07
LDA	Dsl	60	SOx	1.44E-05
LDT1	Dsl	60	SOx	4.86E-07
LDT2	Dsl	60	SOx	8.89E-07
MDV	Dsl	60	SOx	8.70E-06
UBUS	Dsl	60	SOx	2.37E-06
MH	Dsl	60	SOx	2.63E-06
T6 Ag	Dsl	60	SOx	1.02E-05
T6 Public	Dsl	60	SOx	4.70E-06
T6 CAIRP Small	Dsl	60	SOx	3.89E-06
T6 CAIRP Heavy	Dsl	60	SOx	1.23E-06
T6 Instate Construction Small	Dsl	60	SOx	2.68E-05
T6 Instate Construction Heavy	Dsl	60	SOx	4.09E-06
T6 Instate Small	Dsl	60	SOx	0.000266491
T6 Instate Heavy	Dsl	60	SOx	8.84E-05
T6 OOS Small	Dsl	60	SOx	2.23E-06
T6 OOS Heavy	Dsl	60	SOx	7.09E-07
T6 Utility	Dsl	60	SOx	1.55E-06
T7 Ag	Dsl	60	SOx	1.70E-06
T7 Public	Dsl	60	SOx	6.27E-06
T7 CAIRP	Dsl	60	SOx	3.94E-05
T7 CAIRP Construction	Dsl	60	SOx	1.51E-06
T7 Utility	Dsl	60	SOx	1.66E-07
T7 NNOOS	Dsl	60	SOx	4.72E-05
T7 NOOS	Dsl	60	SOx	1.56E-05
T7 Other Port	Dsl	60	SOx	4.78E-07
T7 POAK	Dsl	60	SOx	9.25E-07
T7 Single	Dsl	60	SOx	3.38E-05

T7 Single Construction	Dsl	60	SOx	3.89E-06
T7 Tractor	Dsl	60	SOx	2.64E-05
T7 Tractor Construction	Dsl	60	SOx	2.91E-06
T7 SWCV	Dsl	60	SOx	0
SBUS	Dsl	60	SOx	8.22E-07
Motor Coach	Dsl	60	SOx	1.95E-06
All Other Buses	Dsl	60	SOx	1.66E-06
LDA	Dsl	55	SOx	1.06E-05
LDT1	Dsl	55	SOx	3.56E-07
LDT2	Dsl	55	SOx	6.50E-07
MDV	Dsl	55	SOx	6.36E-06
LHD1	Dsl	55	SOx	6.69E-05
LHD2	Dsl	55	SOx	1.59E-05
UBUS	Dsl	55	SOx	1.56E-06
MH	Dsl	55	SOx	2.19E-06
T6 Ag	Dsl	55	SOx	8.52E-06
T6 Public	Dsl	55	SOx	3.93E-06
T6 CAIRP Small	Dsl	55	SOx	3.27E-06
T6 CAIRP Heavy	Dsl	55	SOx	1.04E-06
T6 Instate Construction Small	Dsl	55	SOx	2.25E-05
T6 Instate Construction Heavy	Dsl	55	SOx	3.43E-06
T6 Instate Small	Dsl	55	SOx	0.000223919
T6 Instate Heavy	Dsl	55	SOx	7.44E-05
T6 OOS Small	Dsl	55	SOx	1.87E-06
T6 OOS Heavy	Dsl	55	SOx	5.97E-07
T6 Utility	Dsl	55	SOx	1.31E-06
T7 Ag	Dsl	55	SOx	5.59E-06
T7 Public	Dsl	55	SOx	2.08E-05
T7 CAIRP	Dsl	55	SOx	0.000130981
T7 CAIRP Construction	Dsl	55	SOx	5.00E-06
T7 Utility	Dsl	55	SOx	5.50E-07
T7 NNOOS	Dsl	55	SOx	0.000156824
T7 NOOS	Dsl	55	SOx	5.17E-05
T7 Other Port	Dsl	55	SOx	1.59E-06
T7 POAK	Dsl	55	SOx	3.08E-06
T7 Single	Dsl	55	SOx	0.000111848
T7 Single Construction	Dsl	55	SOx	1.29E-05
T7 Tractor	Dsl	55	SOx	8.78E-05
T7 Tractor Construction	Dsl	55	SOx	9.63E-06
T7 SWCV	Dsl	55	SOx	0
SBUS	Dsl	55	SOx	1.48E-06
Motor Coach	Dsl	55	SOx	1.87E-06
All Other Buses	Dsl	55	SOx	1.40E-06
LDA	Dsl	70	PM10	0.000198005
LDT1	Dsl	70	PM10	1.55E-05
LDT2	Dsl	70	PM10	3.66E-06
MDV	Dsl	70	PM10	2.75E-05

T6 Ag	Dsl	70	PM10	0
T6 Public	Dsl	70	PM10	0
T6 CAIRP Small	Dsl	70	PM10	0
T6 CAIRP Heavy	Dsl	70	PM10	0
T6 Instate Construction Small	Dsl	70	PM10	0
T6 Instate Construction Heavy	Dsl	70	PM10	0
T6 Instate Small	Dsl	70	PM10	0
T6 Instate Heavy	Dsl	70	PM10	0
T6 OOS Small	Dsl	70	PM10	0
T6 OOS Heavy	Dsl	70	PM10	0
T6 Utility	Dsl	70	PM10	0
T7 Ag	Dsl	70	PM10	0
T7 Public	Dsl	70	PM10	0
T7 CAIRP	Dsl	70	PM10	0
T7 CAIRP Construction	Dsl	70	PM10	0
T7 Utility	Dsl	70	PM10	0
T7 NNOOS	Dsl	70	PM10	0
T7 NOOS	Dsl	70	PM10	0
T7 Other Port	Dsl	70	PM10	0
T7 POAK	Dsl	70	PM10	0
T7 Single	Dsl	70	PM10	0
T7 Single Construction	Dsl	70	PM10	0
T7 Tractor	Dsl	70	PM10	0
T7 Tractor Construction	Dsl	70	PM10	0
SBUS	Dsl	70	PM10	0
Motor Coach	Dsl	70	PM10	0
All Other Buses	Dsl	70	PM10	0
T7 SWCV	Dsl	70	PM10	0
LDA	Dsl	65	PM10	1.83E-05
LDT1	Dsl	65	PM10	1.43E-06
LDT2	Dsl	65	PM10	3.43E-07
MDV	Dsl	65	PM10	2.58E-06
UBUS	Dsl	65	PM10	5.24E-06
MH	Dsl	65	PM10	1.09E-05
T6 Ag	Dsl	65	PM10	9.26E-05
T6 Public	Dsl	65	PM10	2.89E-06
T6 CAIRP Small	Dsl	65	PM10	1.12E-05
T6 CAIRP Heavy	Dsl	65	PM10	1.13E-06
T6 Instate Construction Small	Dsl	65	PM10	8.54E-05
T6 Instate Construction Heavy	Dsl	65	PM10	1.07E-05
T6 Instate Small	Dsl	65	PM10	0.000645754
T6 Instate Heavy	Dsl	65	PM10	7.80E-05
T6 OOS Small	Dsl	65	PM10	6.39E-06
T6 OOS Heavy	Dsl	65	PM10	2.43E-07
T6 Utility	Dsl	65	PM10	2.39E-07
T7 Ag	Dsl	65	PM10	5.64E-05
T7 Public	Dsl	65	PM10	9.98E-06

T7 CAIRP	Dsl	65	PM10	0.000123275
T7 CAIRP Construction	Dsl	65	PM10	8.43E-06
T7 Utility	Dsl	65	PM10	1.03E-07
T7 NNOOS	Dsl	65	PM10	3.96E-05
T7 NOOS	Dsl	65	PM10	2.60E-05
T7 Other Port	Dsl	65	PM10	4.23E-07
T7 POAK	Dsl	65	PM10	8.86E-07
T7 Single	Dsl	65	PM10	0.00019621
T7 Single Construction	Dsl	65	PM10	2.38E-05
T7 Tractor	Dsl	65	PM10	0.00010629
T7 Tractor Construction	Dsl	65	PM10	2.61E-05
SBUS	Dsl	65	PM10	0
Motor Coach	Dsl	65	PM10	1.25E-06
All Other Buses	Dsl	65	PM10	1.72E-06
T7 SWCV	Dsl	65	PM10	0
LDA	Dsl	60	PM10	0.000175702
LDT1	Dsl	60	PM10	1.36E-05
LDT2	Dsl	60	PM10	3.34E-06
MDV	Dsl	60	PM10	2.51E-05
UBUS	Dsl	60	PM10	3.17E-05
MH	Dsl	60	PM10	5.99E-05
T6 Ag	Dsl	60	PM10	0.000588597
T6 Public	Dsl	60	PM10	1.84E-05
T6 CAIRP Small	Dsl	60	PM10	7.09E-05
T6 CAIRP Heavy	Dsl	60	PM10	7.19E-06
T6 Instate Construction Small	Dsl	60	PM10	0.000542935
T6 Instate Construction Heavy	Dsl	60	PM10	6.81E-05
T6 Instate Small	Dsl	60	PM10	0.004103374
T6 Instate Heavy	Dsl	60	PM10	0.000495419
T6 OOS Small	Dsl	60	PM10	4.06E-05
T6 OOS Heavy	Dsl	60	PM10	1.55E-06
T6 Utility	Dsl	60	PM10	1.52E-06
T7 Ag	Dsl	60	PM10	0.000102907
T7 Public	Dsl	60	PM10	1.82E-05
T7 CAIRP	Dsl	60	PM10	0.00022507
T7 CAIRP Construction	Dsl	60	PM10	1.54E-05
T7 Utility	Dsl	60	PM10	1.87E-07
T7 NNOOS	Dsl	60	PM10	7.23E-05
T7 NOOS	Dsl	60	PM10	4.76E-05
T7 Other Port	Dsl	60	PM10	7.73E-07
T7 POAK	Dsl	60	PM10	1.62E-06
T7 Single	Dsl	60	PM10	0.000358231
T7 Single Construction	Dsl	60	PM10	4.35E-05
T7 Tractor	Dsl	60	PM10	0.000194059
T7 Tractor Construction	Dsl	60	PM10	4.77E-05
SBUS	Dsl	60	PM10	5.80E-06
Motor Coach	Dsl	60	PM10	1.16E-05

All Other Buses	Dsl	60	PM10	1.09E-05
T7 SWCV	Dsl	60	PM10	0
LDA	Dsl	55	PM10	0.000127868
LDT1	Dsl	55	PM10	9.87E-06
LDT2	Dsl	55	PM10	2.47E-06
MDV	Dsl	55	PM10	1.86E-05
LHD1	Dsl	55	PM10	0.000407346
LHD2	Dsl	55	PM10	7.08E-05
UBUS	Dsl	55	PM10	1.97E-05
MH	Dsl	55	PM10	4.39E-05
T6 Ag	Dsl	55	PM10	0.000469757
T6 Public	Dsl	55	PM10	1.47E-05
T6 CAIRP Small	Dsl	55	PM10	5.50E-05
T6 CAIRP Heavy	Dsl	55	PM10	5.64E-06
T6 Instate Construction Small	Dsl	55	PM10	0.000420039
T6 Instate Construction Heavy	Dsl	55	PM10	5.26E-05
T6 Instate Small	Dsl	55	PM10	0.003181558
T6 Instate Heavy	Dsl	55	PM10	0.000388251
T6 OOS Small	Dsl	55	PM10	3.15E-05
T6 OOS Heavy	Dsl	55	PM10	1.23E-06
T6 Utility	Dsl	55	PM10	1.23E-06
T7 Ag	Dsl	55	PM10	0.000327185
T7 Public	Dsl	55	PM10	5.85E-05
T7 CAIRP	Dsl	55	PM10	0.000700447
T7 CAIRP Construction	Dsl	55	PM10	4.76E-05
T7 Utility	Dsl	55	PM10	5.93E-07
T7 NNOOS	Dsl	55	PM10	0.00023034
T7 NOOS	Dsl	55	PM10	0.000150321
T7 Other Port	Dsl	55	PM10	2.60E-06
T7 POAK	Dsl	55	PM10	5.44E-06
T7 Single	Dsl	55	PM10	0.001114744
T7 Single Construction	Dsl	55	PM10	0.000132621
T7 Tractor	Dsl	55	PM10	0.000599911
T7 Tractor Construction	Dsl	55	PM10	0.000146389
SBUS	Dsl	55	PM10	9.92E-06
Motor Coach	Dsl	55	PM10	1.04E-05
All Other Buses	Dsl	55	PM10	8.55E-06
T7 SWCV	Dsl	55	PM10	0

