

Appendix C

Energy Calculations

This page intentionally left blank.

Table 1. Summary of Energy Use During Construction

Fuel Type	Quantity
Diesel	
On-Site Construction Equipment	49,120 gallons
Off-Site Motor Vehicles	10,935 gallons
Total	60,055 gallons
Gasoline	
On-Site Construction Equipment	0 gallons
Off-Site Motor Vehicles	16,097 gallons
Total	16,097 gallons
Electricity	2,093 kWh

Note: Totals may not add exactly because of rounding.

Table 2. Summary of Annual Energy Use During Operation

Source	Units	Business-As-Usual	Project	Percent Reduction
Electricity				
Hotel	kWh/yr	1,131,110	1,019,130	-10%
Quality Restaurant	kWh/yr	118,682	111,567	-6%
Building Subtotal		1,249,792	1,130,697	-10%
Indoor Use	kWh/yr	69,123	55,299	-20%
Outdoor Use	kWh/yr	6,150	4,920	-20%
Water Subtotal		75,273	60,218	-20%
Electricity Total		1,325,065	1,190,915	-10%
Natural Gas				
Hotel	kBtu/yr	3,329,460	2,911,080	-13%
Quality Restaurant	kBtu/yr	589,515	572,351	-3%
Building Subtotal		3,918,975	3,483,431	-11%
Natural Gas Total		3,918,975	3,483,431	-11%
Mobile				
Diesel	gallons	12,694	12,694	0%
Gasoline	gallons	72,258	72,258	0%

Table 3. Water by Land Use

Land Use	Units	Indoor/Outdoor Use	Indoor Use	Outdoor Use
Business as Usual				
Hotel	Mgal	4.54065 / 0.504517	4.54065	0.504517
Quality Restaurant	Mgal	0.76794 / 0.0490175	0.76794	0.0490175
Project				
Hotel	Mgal	3.63252 / 0.403613	3.63252	0.403613
Quality Restaurant	Mgal	0.614352 / 0.039214	0.614352	0.039214

Water and Wastewater Electricity Intensity (kWh/gallon)

Supply Water	0.009727
Treat Water	0.000111
Distribute Water	0.001272
Wastewater Treatment	0.001911

Source: CalEEMod User's Guide, Appendix D, Table 9.2

Indoor Water Factor	0.013021 kWh/gallon	(includes wastewater treatment)
Outdoor Water Factor	0.01111 kWh/gallon	

Natural Gas Capacity

2,697 million cubic feet per day
 984,405 million cubic feet per year
 1,009,999,530 million Btu per year

Project Natural Gas

3,483,431 kBtu per year
 3,483 mmBtu per year
 0.00034% of system capacity

Heating Value

1,026 Btu/scf

Source: 2015 Climate Registry Default Emission Factors

Existing Conditions

341,194,000 barrels of gasoline consumed in 2013
 14,330,148,000 gallons of gasoline

Note: One oil barrel is equal to 42 gallons.

Project Gasoline

72,258 gallons per year
 0.00050% of existing consumption

Table 4. Offroad Equipment Fuel Usage During Construction

Phase Name	Offroad Equipment Type	Quantity	Hours per Day	Horsepower	Load Factor	Number of Days	Diesel Fuel Usage (gallons per project)
Site Preparation	Air Compressors	3	8	78	0.48	120	5,391
Site Preparation	Graders	1	8	174	0.41	120	3,424
Site Preparation	Rollers	1	8	80	0.38	120	1,459
Site Preparation	Rough Terrain Forklifts	3	8	100	0.4	120	5,760
Site Preparation	Rubber Tired Dozers	0	7	255	0.4	120	0
Site Preparation	Skid Steer Loaders	2	8	64	0.37	120	2,273
Site Preparation	Tractors/Loaders/Backhoes	1	8	97	0.37	120	1,723
Grading	Graders	1	6	174	0.41	30	642
Grading	Rubber Tired Dozers	1	6	255	0.4	30	918
Grading	Tractors/Loaders/Backhoes	1	7	97	0.37	30	377
Building Construction	Cranes	1	6	226	0.29	305	5,997
Building Construction	Forklifts	1	6	89	0.2	305	1,629
Building Construction	Generator Sets	1	8	84	0.74	305	7,584
Building Construction	Tractors/Loaders/Backhoes	1	6	97	0.37	305	3,284
Building Construction	Welders	3	8	46	0.45	305	7,576
Paving	Cement and Mortar Mixers	1	6	9	0.56	15	23
Paving	Pavers	1	6	125	0.42	15	236
Paving	Paving Equipment	1	8	130	0.36	15	281
Paving	Rollers	1	7	80	0.38	15	160
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	15	215
Architectural Coating	Air Compressors	1	6	78	0.48	15	168
Total							49,120

Notes:

1. Equipment assumptions from CalEEMod.
2. Fuel usage estimate of 0.05 gallons per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3-E.

Conversion

0.05 gallons diesel per horsepower-hour

Table 5. Onroad Vehicle Fuel Usage During Construction

Phase Name	Days	Daily		Total			Trip Length (miles)			Total Length (miles)			Fuel Consumption (gallons)	
		Worker Trips	Vendor Trips	Worker Trips	Vendor Trips	Haul Trips	Worker	Vendor	Hauling	Worker	Vendor	Hauling	Gasoline	Diesel
Site Preparation	120	28	0	3,360	0	0	14.7	6.9	20	49,392	0	0	2,301	0
Grading	30	8	0	240	0	500	14.7	6.9	20	3,528	0	10,000	164	1,746
Building Construction	305	64	25	19,520	7,625	0	14.7	6.9	20	286,944	52,613	0	13,365	9,188
Paving	15	13	0	195	0	0	14.7	6.9	20	2,867	0	0	134	0
Architectural Coating	15	13	0	195	0	0	14.7	6.9	20	2,867	0	0	134	0
Total	485	126	25	23,510	7,625	500	n/a	n/a	n/a	345,597	52,613	10,000	16,097	10,935

Fuel Efficiency

Workers 21.5 miles per gallon (gasoline)

Vendor/Haul Trucks 5.7 miles per gallon (diesel)

Table 6. Water Usage for Control of Fugitive Dust During Construction

Phase Name	Days	Total Disturbed Acreage	Gallons per Year	Electricity (kWh)
Site Preparation	120	60	181,200	1,763
Grading	30	11.25	33,975	330
Building Construction	305	0	0	0
Paving	15	0	0	0
Architectural Coating	15	0	0	0
Total	485	71.25	215,175	2,093

Construction Schedule

5 days per week
22 days per month

Water Usage

3,020 gallons per acre per day

Source: Air & Waste Management Association, Air Pollution Engineering Manual, 1992 Edition

Supply Water Electricity Intensity

0.009727 kWh/gallons (CalEEMod default for South Coast Air Basin)

Table 7. Onroad Vehicles - Operational

Scenario	Annual VMT	Fuel Consumption (gal)	
		Gasoline	Diesel
BAU	1,550,885	72,258	12,694
Future Project	1,550,885	72,258	12,694
Difference	0	0	0

Table 8. Fuel Consumption Summary

Fuel	MPG	% Fleet
Gasoline	20.11	93.7%
Diesel	7.70	6.3%

Table 9. EMFAC2014 Emissions Inventory - Operations

Fuel	VMT (miles/day)	Fuel Consumption (1,000 gal/day)	Fuel Efficiency (miles per gallon)	Fuel Percentage
GAS	212,413,563	10,563	20.11	93.7%
DSL	14,295,293	1,856	7.70	6.3%

Note: Fuel percentage based on VMT.

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: Sub-Area

Region: Los Angeles (SC)

Calendar Year: 2017

Season: Annual

Vehicle Classification: EMIFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdYr	Speed	Fuel	Population	VMT	Trips	Fuel_Consumption
Los Angeles (SC)	2017	All Other Buses	Aggregated	Aggregated	DSL	2677.776769	180821.2736	0	21.77299272
Los Angeles (SC)	2017	LDA	Aggregated	Aggregated	GAS	3540791.809	122392949.7	22263381.45	4998.485626
Los Angeles (SC)	2017	LDA	Aggregated	Aggregated	DSL	26374.23297	994749.7493	161060.2633	30.31062558
Los Angeles (SC)	2017	LDA	Aggregated	Aggregated	ELEC	26092.8491	1190347.08	169760.8141	0
Los Angeles (SC)	2017	LDT1	Aggregated	Aggregated	GAS	314531.73	10632073.69	1905395.222	509.8684924
Los Angeles (SC)	2017	LDT1	Aggregated	Aggregated	DSL	504.2669625	14237.56452	2648.678638	0.584655899
Los Angeles (SC)	2017	LDT1	Aggregated	Aggregated	ELEC	351.7908485	11005.39785	2131.832837	0
Los Angeles (SC)	2017	LDT2	Aggregated	Aggregated	GAS	1236493.422	45356165.19	7799819.963	2473.283726
Los Angeles (SC)	2017	LDT2	Aggregated	Aggregated	DSL	1664.010467	69102.7805	10753.0678	2.688849493
Los Angeles (SC)	2017	LHD1	Aggregated	Aggregated	GAS	80707.81818	2519880.347	1202426.236	233.8813438
Los Angeles (SC)	2017	LHD1	Aggregated	Aggregated	DSL	40929.32993	1633227.919	514839.4814	82.99623507
Los Angeles (SC)	2017	LHD2	Aggregated	Aggregated	GAS	15835.55761	567325.7599	235926.2135	57.32089731
Los Angeles (SC)	2017	LHD2	Aggregated	Aggregated	DSL	17987.11966	770803.5453	226255.3375	43.1645457
Los Angeles (SC)	2017	MCY	Aggregated	Aggregated	GAS	149541.7658	1044573.709	299053.6232	30.47750435
Los Angeles (SC)	2017	MIDV	Aggregated	Aggregated	GAS	831092.2518	28597297.8	5185456.866	2056.30454
Los Angeles (SC)	2017	MIDV	Aggregated	Aggregated	DSL	9631.290572	397734.3379	61935.69499	20.06274148
Los Angeles (SC)	2017	MH	Aggregated	Aggregated	GAS	20742.69256	176502.9159	2075.098964	25.2297653
Los Angeles (SC)	2017	MH	Aggregated	Aggregated	DSL	4159.984808	39159.71741	415.9984808	3.938986162
Los Angeles (SC)	2017	Motor Coach	Aggregated	Aggregated	DSL	687.3899146	102008.3366	0	18.37495791
Los Angeles (SC)	2017	OBUS	Aggregated	Aggregated	GAS	5048.195241	242095.7847	101004.2904	35.3509143
Los Angeles (SC)	2017	PTO	Aggregated	Aggregated	DSL	0	87645.54342	0	19.03164457
Los Angeles (SC)	2017	SBUS	Aggregated	Aggregated	GAS	1030.303536	40903.82449	4121.214143	3.63587007
Los Angeles (SC)	2017	SBUS	Aggregated	Aggregated	DSL	2734.521823	104418.574	0	14.57812865
Los Angeles (SC)	2017	T6 Ag	Aggregated	Aggregated	DSL	140.5922161	2596.331899	0	0.313911127

Region	CalYr	VehClass	MdYr	Speed	Fuel	Population	VMT	Trips	Fuel_Consumption
Los Angeles (SC)	2017	T6 CAIRP heavy	Aggregated	Aggregated	DSL	104.6688891	5828.928663	0	0.68067096
Los Angeles (SC)	2017	T6 CAIRP small	Aggregated	Aggregated	DSL	279.5845655	17893.37237	0	2.100594633
Los Angeles (SC)	2017	T6 instate construction heavy	Aggregated	Aggregated	DSL	1813.499929	116836.8281	0	13.81455283
Los Angeles (SC)	2017	T6 instate construction small	Aggregated	Aggregated	DSL	5321.818743	308932.5267	0	36.42437594
Los Angeles (SC)	2017	T6 instate heavy	Aggregated	Aggregated	DSL	15054.02078	821056.6122	0	96.2732633
Los Angeles (SC)	2017	T6 instate small	Aggregated	Aggregated	DSL	36029.36983	2101087.255	0	247.1678787
Los Angeles (SC)	2017	T6 OOS heavy	Aggregated	Aggregated	DSL	61.86948711	3339.757063	0	0.390784775
Los Angeles (SC)	2017	T6 OOS small	Aggregated	Aggregated	DSL	160.1914488	10252.22991	0	1.203561781
Los Angeles (SC)	2017	T6 Public	Aggregated	Aggregated	DSL	3910.531393	63501.44454	0	7.67927175
Los Angeles (SC)	2017	T6 utility	Aggregated	Aggregated	DSL	791.298597	15398.67613	0	1.900927044
Los Angeles (SC)	2017	T6TS	Aggregated	Aggregated	GAS	12116.74133	633643.0365	242431.7605	94.66820568
Los Angeles (SC)	2017	T7 Ag	Aggregated	Aggregated	DSL	115.8464336	1962.159535	0	0.369754646
Los Angeles (SC)	2017	T7 CAIRP	Aggregated	Aggregated	DSL	4353.692613	905914.9335	0	159.5056284
Los Angeles (SC)	2017	T7 CAIRP construction	Aggregated	Aggregated	DSL	360.3766364	82883.15555	0	14.76074607
Los Angeles (SC)	2017	T7 NNOOS	Aggregated	Aggregated	DSL	4600.533336	1123335.645	0	187.2363861
Los Angeles (SC)	2017	T7 NOOS	Aggregated	Aggregated	DSL	1756.580981	357836.1316	0	64.27140032
Los Angeles (SC)	2017	T7 POLA	Aggregated	Aggregated	DSL	7736.775261	1086745.041	0	203.1099687
Los Angeles (SC)	2017	T7 Public	Aggregated	Aggregated	DSL	4601.398087	105415.6468	0	21.8396932
Los Angeles (SC)	2017	T7 Single	Aggregated	Aggregated	DSL	5195.544605	441400.4756	0	76.77831286
Los Angeles (SC)	2017	T7 single construction	Aggregated	Aggregated	DSL	2527.201178	214407.8182	0	36.73688167
Los Angeles (SC)	2017	T7 SWCV	Aggregated	Aggregated	DSL	3828.127561	176306.2059	0	74.28271173
Los Angeles (SC)	2017	T7 tractor	Aggregated	Aggregated	DSL	8668.887233	1285409.536	0	215.2754857
Los Angeles (SC)	2017	T7 tractor construction	Aggregated	Aggregated	DSL	1945.285005	159856.8753	0	27.63723346
Los Angeles (SC)	2017	T7 utility	Aggregated	Aggregated	DSL	351.4733363	8036.773547	0	1.583156696
Los Angeles (SC)	2017	T7IS	Aggregated	Aggregated	GAS	476.247989	62605.48614	9528.769765	14.01829187
Los Angeles (SC)	2017	UBUS	Aggregated	Aggregated	GAS	1252.759986	147545.7893	5011.039942	30.18319703
Los Angeles (SC)	2017	UBUS	Aggregated	Aggregated	DSL	4125.811703	485148.9564	16503.24681	106.6991764

Table 10. EMFAC2014 Results - Construction

Vehicle Class	Fuel	VMT (miles per day)	Fuel (1,000 gal per day)	Fuel Efficiency (miles per gallon)
LDA	GAS	120,114,912	5,042	23.82
LDT1	GAS	10,559,434	518	20.38
LDT2	GAS	44,165,838	2,474	17.85
		Composite	LDA/LDT1/LDT2:	21.47
T7 Tractor Construction	DSL	154,237	27	5.73

miles per gallon

Construction Worker Fleet Mix

- LDA 50%
- LDT1 25%
- LDT2 25%

Vendor and Delivery/Haul Truck Fleet Mix

- HHDT 100%

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: Sub-Area
 Region: Los Angeles (SC)
 Calendar Year: 2016
 Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdYr	Speed	Fuel	Population	VMT	Trips	Fuel_Consumption
Los Angeles (	2016	LDA	Aggregated	Aggregated	GAS	3504141.051	120114912.4	22014191.53	5042.251609
Los Angeles (	2016	LDA	Aggregated	Aggregated	DSL	24044.88251	900435.7867	145657.1668	28.35068342
Los Angeles (	2016	LDA	Aggregated	Aggregated	ELEC	20625.33277	960322.0319	134199.3461	0
Los Angeles (	2016	LDT1	Aggregated	Aggregated	GAS	315667.7706	10559434.2	1909637.431	518.0401598
Los Angeles (	2016	LDT1	Aggregated	Aggregated	DSL	530.1255164	14943.70415	2797.754938	0.620388872
Los Angeles (	2016	LDT1	Aggregated	Aggregated	ELEC	370.3892711	11610.38802	2250.951779	0
Los Angeles (	2016	LDT2	Aggregated	Aggregated	GAS	1213500.412	44165838.08	7645517.488	2473.775988
Los Angeles (	2016	LDT2	Aggregated	Aggregated	DSL	1455.03095	61373.89172	9401.957613	2.435156329
Los Angeles (	2016	T7 tractor (	Aggregated	Aggregated	DSL	2014.774391	154236.9728	0	26.93608156

78 N. Marengo Kimpton Hotel Project (with Design Features)
 Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	15.85	1000sqft	0.36	15,853.00	0
Hotel	179.00	Room	0.76	133,072.00	0
Quality Restaurant	2.53	1000sqft	0.00	2,530.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2017

Utility Company Pasadena Water & Power

CO2 Intensity (lb/MW/hr)	1664.14	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
--------------------------	---------	--------------------------	-------	--------------------------	-------

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage for hotel equal to total graded area; no acreage for restaurant because the restaurant would occupy existing space at the YWCA.

Construction Phase - Construction schedule provided by project applicant; months and years estimated to maximize emissions.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment details provided by project applicant

Grading -

Architectural Coating - VOC limits changed to be compliant with Rule 1113

Area Coating - VOC limits changed to be compliant with Rule 1113

Construction Off-road Equipment Mitigation - Measure required for Rule 403 compliance

Trips and VMT -

Vehicle Trips -

Water And Wastewater -

Solid Waste -

Mobile Land Use Mitigation - The Memorial Park Station of the Los Angeles County Metropolitan Transportation Authority (Metro) Gold Line is located one block west of the proposed project site.

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	250
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	200.00	305.00

tblConstructionPhase	NumDays	4.00	30.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	120.00
tblConstructionPhase	PhaseStartDate	12/17/2016	12/19/2016
tblConstructionPhase	PhaseStartDate	9/26/2015	9/28/2015
tblConstructionPhase	PhaseStartDate	8/15/2015	8/17/2015
tblConstructionPhase	PhaseStartDate	11/26/2016	11/28/2016
tblGrading	MaterialExported	0.00	2,500.00
tblGrading	MaterialImported	0.00	1,500.00
tblLandUse	LandUseSquareFeet	15,850.00	15,853.00
tblLandUse	LandUseSquareFeet	259,908.00	133,072.00
tblLandUse	LotAcreage	5.97	0.76
tblLandUse	LotAcreage	0.06	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Site Preparation
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction
Unmitigated Construction

Year	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2015	0.4512	3.6853	2.8127	4.2000e-003	0.1592	0.2357	0.3949	0.0557	0.2234	0.2791	0.0000	375.5196	0.0768	0.0000	0.0000	377.1320
2016	0.6946	2.8545	2.6767	4.4300e-003	0.1026	0.1731	0.2757	0.0276	0.1665	0.1941	0.0000	370.9274	0.0562	0.0000	0.0000	372.1074
2017	0.1180	5.6500e-003	6.6200e-003	1.0000e-005	3.6000e-004	4.4000e-004	7.9000e-004	9.0000e-005	4.4000e-004	5.3000e-004	0.0000	0.9728	9.0000e-005	0.0000	0.0000	0.9746
Total	1.2637	6.5454	5.4961	8.6400e-003	0.2622	0.4092	0.6714	0.0834	0.3904	0.4738	0.0000	747.4198	0.1331	0.0000	0.0000	750.2140

Mitigated Construction

Year	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2015	0.4512	3.6853	2.8127	4.2000e-003	0.0947	0.2357	0.3304	0.0305	0.2234	0.2539	0.0000	375.5192	0.0768	0.0000	0.0000	377.1316
2016	0.6946	2.8545	2.6767	4.4300e-003	0.1026	0.1731	0.2757	0.0276	0.1665	0.1941	0.0000	370.9272	0.0562	0.0000	0.0000	372.1072
2017	0.1180	5.6500e-003	6.6200e-003	1.0000e-005	3.6000e-004	4.4000e-004	7.9000e-004	9.0000e-005	4.4000e-004	5.3000e-004	0.0000	0.9728	9.0000e-005	0.0000	0.0000	0.9746
Total	1.2637	6.5454	5.4961	8.6400e-003	0.1977	0.4092	0.6069	0.0582	0.3904	0.4485	0.0000	747.4192	0.1331	0.0000	0.0000	750.2134

	ROG	NOx	CO	SO2	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	24.60	0.00	9.61	30.25	0.00	5.33	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	0.6879	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003
Energy	0.0211	0.1921	0.1614	1.1500e-003	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0000	1.152.527 ⁸	1,152.527 ⁸	0.0205	7.2400e-003	1,155.200 ²
Mobile	0.9372	2.4010	9.6116	0.0212	1.3919	0.0319	1.4239	0.3728	0.0294	0.4022	0.0000	1,642.623 ⁶	1,642.623 ⁶	0.0688	0.0000	1,644.067 ⁹
Waste						0.0000	0.0000		0.0000	0.0000	20.3620	0.0000	20.3620	1.2034	0.0000	45.6326
Water						0.0000	0.0000		0.0000	0.0000	1.6842	56.8191	58.5033	0.1740	4.2900e-003	63.4864
Total	1.6463	2.5931	9.7755	0.0223	1.3919	0.0466	1.4385	0.3728	0.0440	0.4168	22.0462	2,851.975⁴	2,874.021⁵	1.4666	0.0115	2,908.392³

**2.2 Overall Operational
Mitigated Operational**

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Area	0.6879	2.000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	0.0000	5.1800e-003
Energy	0.0188	0.1708	0.1434	1.0200e-003	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130	0.0000	1,039.3872	1,039.3872	0.0184	6.4900e-003	1,041.7848	8
Mobile	0.8827	1.9860	8.2771	0.0169	1.0963	0.0257	1.1220	0.2936	0.0236	0.3173	0.0000	1,306.4485	1,306.4485	0.0558	0.0000	1,307.6203	3
Waste						0.0000	0.0000	0.0000	0.0000	0.0000	20.3620	0.0000	20.3620	1.2034	0.0000	45.6326	
Water						0.0000	0.0000	0.0000	0.0000	0.0000	1.3473	44.0065	45.3539	0.1392	3.4300e-003	49.3382	
Total	1.5894	2.1568	8.4232	0.0179	1.0963	0.0387	1.1350	0.2936	0.0366	0.3303	21.7094	2,389.8471	2,411.5564	1.4168	9.9200e-003	2,444.3810	

3.0 Construction Detail

Construction Phase

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
3.45	16.83	13.83	19.96	21.24	16.93	21.10	21.24	16.79	20.77	1.53	16.20	16.09	3.40	13.96	15.95

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2015	8/14/2015	5	120	
2	Grading	Grading	8/17/2015	9/25/2015	5	30	
3	Building Construction	Building Construction	9/28/2015	11/25/2016	5	305	
4	Paving	Paving	11/28/2016	12/16/2016	5	15	
5	Architectural Coating	Architectural Coating	12/19/2016	1/6/2017	5	15	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 11.25

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 227,183; Non-Residential Outdoor: 75,728 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Air Compressors	3	8.00	78	0.48
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Rough Terrain Forklifts	3	8.00	100	0.40
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Site Preparation	Skid Steer Loaders	2	8.00	64	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	11	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	64.00	25.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area
Clean Paved Roads

3.2 Site Preparation - 2015
Unmitigated Construction On-Site

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
tons/yr																
Fugitive Dust					0.0318	0.0000	0.0318	3.4400e-003	0.0000	3.4400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2625	2.4111	1.6181	2.3000e-003	0.1633	0.1633	0.1633	0.1545	0.1545	0.1545	0.0000	212.1069	212.1069	0.0530	0.0000	213.2200
Total	0.2625	2.4111	1.6181	2.3000e-003	0.0318	0.1633	0.1951	3.4400e-003	0.1545	0.1579	0.0000	212.1069	212.1069	0.0530	0.0000	213.2200
MT/yr																

3.2 Site Preparation - 2015
Unmitigated Construction Off-Site

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
	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	8.1500e-003	0.0119	0.1235	2.3000e-004	0.0184	1.9000e-004	0.0186	4.8900e-003	1.7000e-004	5.0600e-003	0.0000	18.5843	18.5843	1.1100e-003	0.0000	18.6075
Total	8.1500e-003	0.0119	0.1235	2.3000e-004	0.0184	1.9000e-004	0.0186	4.8900e-003	1.7000e-004	5.0600e-003	0.0000	18.5843	18.5843	1.1100e-003	0.0000	18.6075

Mitigated Construction On-Site

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
	tons/yr															
	MT/yr															
Fugitive Dust					0.0124	0.0000	0.0124	1.3400e-003	0.0000	1.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2625	2.4111	1.6181	2.3000e-003		0.1633	0.1633		0.1545	0.1545	0.0000	212.1066	212.1066	0.0530	0.0000	213.2198
Total	0.2625	2.4111	1.6181	2.3000e-003	0.0124	0.1633	0.1757	1.3400e-003	0.1545	0.1558	0.0000	212.1066	212.1066	0.0530	0.0000	213.2198

3.2 Site Preparation - 2015
Mitigated Construction Off-Site

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
	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	8.1500e-003	0.0119	0.1235	2.3000e-004	0.0184	1.9000e-004	0.0186	4.8900e-003	1.7000e-004	5.0600e-003	0.0000	18.5843	18.5843	1.1100e-003	0.0000	18.6075
Total	8.1500e-003	0.0119	0.1235	2.3000e-004	0.0184	1.9000e-004	0.0186	4.8900e-003	1.7000e-004	5.0600e-003	0.0000	18.5843	18.5843	1.1100e-003	0.0000	18.6075

3.3 Grading - 2015
Unmitigated Construction On-Site

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
	tons/yr															
	MT/yr															
Fugitive Dust					0.0739	0.0000	0.0739	0.0379	0.0000	0.0379	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0310	0.3292	0.2114	2.1000e-004		0.0180	0.0180	0.0165	0.0165	0.0165	0.0000	20.1368	20.1368	6.0100e-003	0.0000	20.2630
Total	0.0310	0.3292	0.2114	2.1000e-004	0.0739	0.0180	0.0919	0.0379	0.0165	0.0544	0.0000	20.1368	20.1368	6.0100e-003	0.0000	20.2630

3.3 Grading - 2015
Unmitigated Construction Off-Site

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
	tons/yr															
	MT/yr															
Hauling	5.2100e-003	0.0836	0.0603	1.9000e-004	4.2800e-003	1.3100e-003	5.5900e-003	1.1700e-003	1.2000e-003	2.3800e-003	0.0000	17.2443	17.2443	1.4000e-004	0.0000	17.2473
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	5.8000e-004	8.5000e-004	8.8200e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.3275	1.3275	8.0000e-005	0.0000	1.3291
Total	5.7900e-003	0.0844	0.0691	2.1000e-004	5.5900e-003	1.3200e-003	6.9200e-003	1.5200e-003	1.2100e-003	2.7400e-003	0.0000	18.5718	18.5718	2.2000e-004	0.0000	18.5764

Mitigated Construction On-Site

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
	tons/yr															
	MT/yr															
Fugitive Dust					0.0288	0.0000	0.0288	0.0148	0.0000	0.0148	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0310	0.3292	0.2114	2.1000e-004		0.0180	0.0180	0.0165	0.0165	0.0165	0.0000	20.1368	20.1368	6.0100e-003	0.0000	20.2630
Total	0.0310	0.3292	0.2114	2.1000e-004	0.0288	0.0180	0.0468	0.0148	0.0165	0.0313	0.0000	20.1368	20.1368	6.0100e-003	0.0000	20.2630

3.3 Grading - 2015

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					CO2e
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	
Hauling	5.2100e-003	0.0836	0.0603	1.9000e-004	4.2800e-003	1.3100e-003	5.5900e-003	1.1700e-003	1.2000e-003	2.3800e-003	0.0000	17.2443	17.2443	1.4000e-004	0.0000	17.2473
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	5.8000e-004	8.5000e-004	8.8200e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.3275	1.3275	8.0000e-005	0.0000	1.3291
Total	5.7900e-003	0.0844	0.0691	2.1000e-004	5.5900e-003	1.3200e-003	6.9200e-003	1.5200e-003	1.2100e-003	2.7400e-003	0.0000	18.5718	18.5718	2.2000e-004	0.0000	18.5764

3.4 Building Construction - 2015

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					CO2e
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	
Off-Road	0.1242	0.7440	0.5176	7.6000e-004		0.0512	0.0512		0.0495	0.0495	0.0000	64.3367	64.3367	0.0148	0.0000	64.6483
Total	0.1242	0.7440	0.5176	7.6000e-004		0.0512	0.0512		0.0495	0.0495	0.0000	64.3367	64.3367	0.0148	0.0000	64.6483

3.4 Building Construction - 2015
Unmitigated Construction Off-Site

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
	tons/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	8.8300e-003	0.0892	0.1108	1.9000e-004	5.2900e-003	1.4400e-003	6.7200e-003	1.5100e-003	1.3200e-003	2.8300e-003	0.0000	17.3583	17.3583	1.4000e-004	0.0000	17.3612
Worker	0.0107	0.0156	0.1623	3.1000e-004	0.0242	2.5000e-004	0.0244	6.4300e-003	2.3000e-004	6.6500e-003	0.0000	24.4250	24.4250	1.4500e-003	0.0000	24.4556
Total	0.0195	0.1048	0.2731	5.0000e-004	0.0295	1.6900e-003	0.0312	7.9400e-003	1.5500e-003	9.4800e-003	0.0000	41.7833	41.7833	1.5900e-003	0.0000	41.8168

Mitigated Construction On-Site

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
	tons/yr															
Off-Road	0.1242	0.7440	0.5176	7.6000e-004		0.0512	0.0512		0.0495	0.0495	0.0000	64.3366	64.3366	0.0148	0.0000	64.6482
Total	0.1242	0.7440	0.5176	7.6000e-004		0.0512	0.0512		0.0495	0.0495	0.0000	64.3366	64.3366	0.0148	0.0000	64.6482

3.4 Building Construction - 2015
Mitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	8.8300e-003	0.0892	0.1108	1.9000e-004	5.2900e-003	1.4400e-003	6.7200e-003	1.5100e-003	1.3200e-003	2.8300e-003	0.0000	17.3583	17.3583	1.4000e-004	0.0000	17.3612
Worker	0.0107	0.0156	0.1623	3.1000e-004	0.0242	2.5000e-004	0.0244	6.4300e-003	2.3000e-004	6.6500e-003	0.0000	24.4250	24.4250	1.4500e-003	0.0000	24.4556
Total	0.0195	0.1048	0.2731	5.0000e-004	0.0295	1.6900e-003	0.0312	7.9400e-003	1.5500e-003	9.4800e-003	0.0000	41.7833	41.7833	1.5900e-003	0.0000	41.8168

3.4 Building Construction - 2016
Unmitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.3884	2.4244	1.7355	2.5900e-003		0.1611	0.1611		0.1555	0.1555	0.0000	219.1208	219.1208	0.0482	0.0000	220.1322
Total	0.3884	2.4244	1.7355	2.5900e-003		0.1611	0.1611		0.1555	0.1555	0.0000	219.1208	219.1208	0.0482	0.0000	220.1322

3.4 Building Construction - 2016
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0265	0.2699	0.3506	6.5000e-004	0.0181	4.0500e-003	0.0222	5.1600e-003	3.7300e-003	8.8900e-003	0.0000	58.7298	58.7298	4.4000e-004	0.0000	58.7390
Worker	0.0330	0.0482	0.5023	1.0500e-003	0.0828	8.0000e-004	0.0836	0.0220	7.3000e-004	0.0227	0.0000	80.7520	80.7520	4.5800e-003	0.0000	80.8482
Total	0.0595	0.3181	0.8529	1.7000e-003	0.1008	4.8500e-003	0.1057	0.0271	4.4600e-003	0.0316	0.0000	139.4818	139.4818	5.0200e-003	0.0000	139.5872

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.3884	2.4244	1.7355	2.5900e-003		0.1611	0.1611		0.1555	0.1555	0.0000	219.1205	219.1205	0.0482	0.0000	220.1319
Total	0.3884	2.4244	1.7355	2.5900e-003		0.1611	0.1611		0.1555	0.1555	0.0000	219.1205	219.1205	0.0482	0.0000	220.1319

3.4 Building Construction - 2016
Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0265	0.2699	0.3506	6.5000e-004	0.0181	4.0500e-003	0.0222	5.1600e-003	3.7300e-003	8.8900e-003	0.0000	58.7298	58.7298	4.4000e-004	0.0000	58.7390
Worker	0.0330	0.0482	0.5023	1.0500e-003	0.0828	8.0000e-004	0.0836	0.0220	7.3000e-004	0.0227	0.0000	80.7520	80.7520	4.5800e-003	0.0000	80.8482
Total	0.0595	0.3181	0.8529	1.7000e-003	0.1008	4.8500e-003	0.1057	0.0271	4.4600e-003	0.0316	0.0000	139.4818	139.4818	5.0200e-003	0.0000	139.5872

3.5 Paving - 2016
Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	9.6500e-003	0.0991	0.0682	1.0000e-004		6.0600e-003	6.0600e-003		5.5800e-003	5.5800e-003	0.0000	9.3107	9.3107	2.7600e-003	0.0000	9.3686
Paving	4.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0101	0.0991	0.0682	1.0000e-004		6.0600e-003	6.0600e-003		5.5800e-003	5.5800e-003	0.0000	9.3107	9.3107	2.7600e-003	0.0000	9.3686

3.5 Paving - 2016

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	4.3000e-004	6.2000e-004	6.4900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0426	1.0426	6.0000e-005	0.0000	1.0438
Total	4.3000e-004	6.2000e-004	6.4900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0426	1.0426	6.0000e-005	0.0000	1.0438

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	9.6500e-003	0.0991	0.0682	1.0000e-004		6.0600e-003	6.0600e-003	5.5800e-003	5.5800e-003	5.5800e-003	0.0000	9.3107	9.3107	2.7600e-003	0.0000	9.3686
Paving	4.7000e-004					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0101	0.0991	0.0682	1.0000e-004		6.0600e-003	6.0600e-003	5.5800e-003	5.5800e-003	5.5800e-003	0.0000	9.3107	9.3107	2.7600e-003	0.0000	9.3686

3.5 Paving - 2016

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	4.3000e-004	6.2000e-004	6.4900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0426	1.0426	6.0000e-005	0.0000	1.0438
Total	4.3000e-004	6.2000e-004	6.4900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0426	1.0426	6.0000e-005	0.0000	1.0438

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	0.2340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0119	9.4200e-003	1.0000e-005	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798
Total	0.2358	0.0119	9.4200e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798

3.6 Architectural Coating - 2016
Unmitigated Construction Off-Site

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
	tons/yr															
	MT/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6950	0.6950	4.0000e-005	0.0000	0.6959
Total	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6950	0.6950	4.0000e-005	0.0000	0.6959

Mitigated Construction On-Site

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
	tons/yr															
	MT/yr															
Archit. Coating	0.2340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0119	9.4200e-003	1.0000e-005	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798
Total	0.2358	0.0119	9.4200e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798

3.6 Architectural Coating - 2016
Mitigated Construction Off-Site

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
	tons/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6950	0.6950	4.0000e-005	0.0000	0.6959
Total	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6950	0.6950	4.0000e-005	0.0000	0.6959

3.6 Architectural Coating - 2017
Unmitigated Construction On-Site

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
	tons/yr															
Archit. Coating	0.1170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	0.1178	5.4600e-003	4.6700e-003	1.0000e-005	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397

3.6 Architectural Coating - 2017
Unmitigated Construction Off-Site

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
	tons/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	1.9000e-004	1.9500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3345	0.3345	2.0000e-005	0.0000	0.3349
Total	1.3000e-004	1.9000e-004	1.9500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3345	0.3345	2.0000e-005	0.0000	0.3349

Mitigated Construction On-Site

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
	tons/yr															
Archit. Coating	0.1170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	0.1178	5.4600e-003	4.6700e-003	1.0000e-005	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397

3.6 Architectural Coating - 2017
Mitigated Construction Off-Site

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	
	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	1.3000e-004	1.9000e-004	1.9500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3345	0.3345	2.0000e-005	0.0000	0.0000	0.3349
Total	1.3000e-004	1.9000e-004	1.9500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3345	0.3345	2.0000e-005	0.0000	0.0000	0.3349

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	0.8827	1.9860	8.2771	0.0169	1.0963	0.0257	1.1220	0.2936	0.0236	0.3173	0.0000	1,306.4485	1,306.4485	0.0558	0.0000	1,307.6203
Unmitigated	0.9372	2.4010	9.6116	0.0212	1.3919	0.0319	1.4239	0.3728	0.0294	0.4022	0.0000	1,642.6236	1,642.6236	0.0688	0.0000	1,644.0679

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Hotel	1,462.43	1,466.01	1065.05	3,355,369	2,642,722		
Other Asphalt Surfaces	0.00	0.00	0.00				
Quality Restaurant	227.57	238.73	182.56	317,096	249,748		
Total	1,690.00	1,704.74	1,247.61	3,672,465	2,892,470		

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	Primary	Diverted	Pass-by	Pass-by
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4				
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0				
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44				

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.532559	0.058242	0.178229	0.125155	0.038934	0.006273	0.016761	0.032323	0.002478	0.003154	0.003685	0.000544	0.001663

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	853.4979	853.4979	0.0149	3.0800e-003	854.7642
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	943.3962	943.3962	0.0164	3.4000e-003	944.7959
NaturalGas Mitigated	0.0188	0.1708	0.1434	1.0200e-003		0.0130	0.0130		0.0130	0.0130	0.0000	185.8893	185.8893	3.5600e-003	3.4100e-003	187.0206
NaturalGas Unmitigated	0.0211	0.1921	0.1614	1.1500e-003		0.0146	0.0146		0.0146	0.0146	0.0000	209.1315	209.1315	4.0100e-003	3.8300e-003	210.4043

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use kBTU/yr	tons/yr										MT/yr				CO2e	
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4		N2O
Hotel	3.32946e+006	0.0180	0.1632	0.1371	9.8000e-004	0.0124	0.0124	0.0124	0.0124	0.0124	0.0124	0.0000	177.6727	177.6727	3.4100e-003	3.2600e-003	178.7540
Other Asphalt Surfaces	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	0.0000
Quality Restaurant	589515	3.1800e-003	0.0289	0.0243	1.7000e-004	2.2000e-003	2.2000e-003	2.2000e-003	2.2000e-003	2.2000e-003	2.2000e-003	0.0000	31.4588	31.4588	6.0000e-004	5.8000e-004	31.6502
Total		0.0211	0.1921	0.1614	1.1500e-003	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0000	209.1315	209.1315	4.0100e-003	3.8400e-003	210.4043

Mitigated

Land Use	NaturalGas Use kBTU/yr	tons/yr										MT/yr				CO2e	
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4		N2O
Other Asphalt Surfaces	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	0.0000
Quality Restaurant	572351	3.0900e-003	0.0281	0.0236	1.7000e-004	2.1300e-003	2.1300e-003	2.1300e-003	2.1300e-003	2.1300e-003	2.1300e-003	0.0000	30.5428	30.5428	5.9000e-004	5.6000e-004	30.7287
Hotel	2.91108e+006	0.0157	0.1427	0.1199	8.6000e-004	0.0109	0.0109	0.0109	0.0109	0.0109	0.0109	0.0000	155.3465	155.3465	2.9800e-003	2.8500e-003	156.2919
Total		0.0188	0.1708	0.1434	1.0300e-003	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130	0.0000	185.8893	185.8893	3.5700e-003	3.4100e-003	187.0206

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use kWh/yr	Total CO2	CH4	N2O	CO2e
Hotel	1.13111e+006	853.8100	0.0149	3.0800e-003	855.0767
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	118682	89.5863	1.5600e-003	3.2000e-004	89.7192
Total		943.3962	0.0164	3.4000e-003	944.7959

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2	CH4	N2O	CO2e
Hotel	1.01913e+006	769.2828	0.0134	2.7700e-003	770.4241
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	111567	84.2151	1.4700e-003	3.0000e-004	84.3401
Total		853.4979	0.0149	3.0700e-003	854.7642

6.0 Area Detail

6.1 Mitigation Measures Area

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	
	tons/yr																
	MT/yr																
Mitigated	0.6879	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	0.0000	5.1800e-003
Unmitigated	0.6879	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	0.0000	5.1800e-003

6.2 Area by SubCategory
Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
	tons/yr																
	MT/yr																
Architectural Coating	0.1404				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5473				0.0000	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	2.5000e-004	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	0.0000	5.1800e-003
Total	0.6879	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	0.0000	5.1800e-003

6.2 Area by SubCategory

Mitigated

SubCategory	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.1404					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5473					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003
Total	0.6879	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Category	MT/yr				CO2e
	Total CO2	CH4	N2O	CO2e	
Mitigated	45.3539	0.1392	3.4300e-003	49.3382	
Unmitigated	58.5033	0.1740	4.2900e-003	63.4864	

7.2 Water by Land Use

Unmitigated

Land Use	Mgal	MT/yr				CO2e
		Total CO2	CH4	N2O	CO2e	
Hotel	4.540657 0.504517	50.3007	0.1488	3.6700e-003	54.5633	
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000	
Quality Restaurant	0.767947 0.0490175	8.2026	0.0252	6.2000e-004	8.9231	
Total		58.5033	0.1740	4.2900e-003	63.4864	

Mitigated

Land Use	Mgal	MT/yr				CO2e
		Total CO2	CH4	N2O	CO2e	
Hotel	3.632527 0.403613	39.0013	0.1190	2.9300e-003	42.4096	
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000	
Quality Restaurant	0.6143527 0.039214	6.3525	0.0201	4.9000e-004	6.9286	
Total		45.3539	0.1392	3.4200e-003	49.3382	

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	20.3620	1.2034	0.0000	45.6326
Unmitigated	20.3620	1.2034	0.0000	45.6326

8.2 Waste by Land Use

Unmitigated

Land Use	Waste Disposed tons	Total CO2			CO2e
		CH4	N2O	CO2e	
Hotel	98	19.8931	1.1757	0.0000	44.5818
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.31	0.4689	0.0277	0.0000	1.0509
Total		20.3620	1.2034	0.0000	45.6326

8.2 Waste by Land Use

Mitigated

Land Use	Waste Disposed tons	Total CO2			CO2e
		CH4	N2O	CO2e	
Hotel	98	1.1757	0.0000	44.5818	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	
Quality Restaurant	2.31	0.0277	0.0000	1.0509	
Total		1.2034	0.0000	45.6326	

9.0 Operational Offroad

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

10.0 Vegetation

78 N. Marengo Kimpton Hotel Project
 Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	179.00	Room	0.76	133,072.00	0
Quality Restaurant	2.53	1000sqft	0.00	2,530.00	0
Other Asphalt Surfaces	15.85	1000sqft	0.36	15,853.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2017

Utility Company Pasadena Water & Power

CO2 Intensity (lb/MW/hr)	1664.14	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
---------------------------------	---------	---------------------------------	-------	---------------------------------	-------

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage for hotel equal to total graded area; no acreage for restaurant because the restaurant would occupy existing space at the YWCA.

Construction Phase - Construction schedule provided by project applicant; months and years estimated to maximize emissions.

Off-road Equipment - Equipment details provided by project applicant

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Architectural Coating - VOC limits changed to be compliant with Rule 1113

Area Coating - VOC limits changed to be compliant with Rule 1113

Construction Off-road Equipment Mitigation - Measure required for Rule 403 compliance

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	50	250
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	200.00	305.00
tblConstructionPhase	NumDays	4.00	30.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	120.00
tblConstructionPhase	PhaseStartDate	12/17/2016	12/19/2016
tblConstructionPhase	PhaseStartDate	9/26/2015	9/28/2015
tblConstructionPhase	PhaseStartDate	8/15/2015	8/17/2015
tblConstructionPhase	PhaseStartDate	11/26/2016	11/28/2016

tblGrading	MaterialExported	0.00	2,500.00
tblGrading	MaterialImported	0.00	1,500.00
tblLandUse	LandUseSquareFeet	259,908.00	133,072.00
tblLandUse	LandUseSquareFeet	15,850.00	15,853.00
tblLandUse	LotAcreage	5.97	0.76
tblLandUse	LotAcreage	0.06	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction
Unmitigated Construction

Year	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2015	0.4511	3.6847	2.8126	4.2000e-003	0.1592	0.2356	0.3948	0.0557	0.2233	0.2790	0.0000	375.5310	375.5310	0.0768	0.0000	377.1434
2016	0.6946	2.8545	2.6767	4.4300e-003	0.1026	0.1731	0.2757	0.0276	0.1665	0.1941	0.0000	370.9274	370.9274	0.0562	0.0000	372.1074
2017	0.1180	5.6500e-003	6.6200e-003	1.0000e-005	3.6000e-004	4.4000e-004	7.9000e-004	9.0000e-005	4.4000e-004	5.3000e-004	0.0000	0.9728	0.9728	9.0000e-005	0.0000	0.9746
Total	1.2636	6.5448	5.4960	8.6400e-003	0.2622	0.4091	0.6713	0.0834	0.3903	0.4737	0.0000	747.4312	747.4312	0.1331	0.0000	750.2254

Mitigated Construction

Year	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2015	0.4511	3.6847	2.8126	4.2000e-003	0.0947	0.2356	0.3303	0.0305	0.2233	0.2538	0.0000	375.5306	375.5306	0.0768	0.0000	377.1430
2016	0.6946	2.8545	2.6767	4.4300e-003	0.1026	0.1731	0.2757	0.0276	0.1665	0.1941	0.0000	370.9272	370.9272	0.0562	0.0000	372.1072
2017	0.1180	5.6500e-003	6.6200e-003	1.0000e-005	3.6000e-004	4.4000e-004	7.9000e-004	9.0000e-005	4.4000e-004	5.3000e-004	0.0000	0.9728	0.9728	9.0000e-005	0.0000	0.9746
Total	1.2636	6.5448	5.4960	8.6400e-003	0.1977	0.4091	0.6068	0.0582	0.3903	0.4485	0.0000	747.4306	747.4306	0.1331	0.0000	750.2248

	ROG	NOx	CO	SO2	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	24.60	0.00	9.61	30.25	0.00	5.32	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational
Unmitigated Operational

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	0.6879	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003
Energy	0.0211	0.1921	0.1614	1.1500e-003	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0000	1,152.5278	1,152.5278	0.0205	7.2400e-003	1,155.2002
Mobile	0.9372	2.4010	9.6116	0.0212	1.3919	0.0319	1.4239	0.3728	0.0294	0.4022	0.0000	1,642.6236	1,642.6236	0.0688	0.0000	1,644.0679
Waste						0.0000	0.0000		0.0000	0.0000	20.3620	0.0000	20.3620	1.2034	0.0000	45.6326
Water						0.0000	0.0000		0.0000	0.0000	1.6842	56.8191	58.5033	0.1740	4.2900e-003	63.4864
Total	1.6463	2.5931	9.7755	0.0223	1.3919	0.0466	1.4385	0.3728	0.0440	0.4168	22.0462	2,851.9754	2,874.0215	1.4666	0.0115	2,908.3923

**2.2 Overall Operational
Mitigated Operational**

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Area	0.6879	2.000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	0.0000	5.1800e-003
Energy	0.0211	0.1921	0.1614	1.1500e-003	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0000	1,152.5278	1,152.5278	0.0205	7.2400e-003	1,155.2002	
Mobile	0.9372	2.4010	9.6116	0.0212	1.3919	0.0319	1.4239	0.3728	0.0294	0.4022	0.0000	1,642.6236	1,642.6236	0.0688	0.0000	1,644.0679	
Waste						0.0000	0.0000	0.0000	0.0000	0.0000	20.3620	0.0000	20.3620	1.2034	0.0000	45.6326	
Water						0.0000	0.0000	0.0000	0.0000	0.0000	1.6842	56.8191	58.5033	0.1739	4.2800e-003	63.4837	
Total	1.6463	2.5931	9.7755	0.0223	1.3919	0.0466	1.4385	0.3728	0.0440	0.4168	22.0462	2,851.9754	2,874.0215	1.4665	0.0115	2,908.3896	

3.0 Construction Detail

Construction Phase

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2015	8/14/2015	5	120	
2	Grading	Grading	8/17/2015	9/25/2015	5	30	
3	Building Construction	Building Construction	9/28/2015	11/25/2016	5	305	
4	Paving	Paving	11/28/2016	12/16/2016	5	15	
5	Architectural Coating	Architectural Coating	12/19/2016	1/6/2017	5	15	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 11.25

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 227,183; Non-Residential Outdoor: 75,728 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Site Preparation	Skid Steer Loaders	2	8.00	64	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Site Preparation	Rough Terrain Forklifts	3	8.00	100	0.40
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Rollers	1	8.00	80	0.38
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45
Site Preparation	Air Compressors	3	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	11	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	64.00	25.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area
 Clean Paved Roads

3.2 Site Preparation - 2015
Unmitigated Construction On-Site

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
	tons/yr															
	MT/yr															
Fugitive Dust					0.0318	0.0000	0.0318	3.4400e-003	0.0000	3.4400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2624	2.4105	1.6180	2.3000e-003	0.1632	0.1632	0.1632	0.1544	0.1544	0.1544	0.0000	212.1182	212.1182	0.0530	0.0000	213.2315
Total	0.2624	2.4105	1.6180	2.3000e-003	0.0318	0.1632	0.1950	3.4400e-003	0.1544	0.1578	0.0000	212.1182	212.1182	0.0530	0.0000	213.2315

3.2 Site Preparation - 2015
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	8.1500e-003	0.0119	0.1235	2.3000e-004	0.0184	1.9000e-004	0.0186	4.8900e-003	1.7000e-004	5.0600e-003	0.0000	18.5843	18.5843	1.1100e-003	0.0000	18.6075
Total	8.1500e-003	0.0119	0.1235	2.3000e-004	0.0184	1.9000e-004	0.0186	4.8900e-003	1.7000e-004	5.0600e-003	0.0000	18.5843	18.5843	1.1100e-003	0.0000	18.6075

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0124	0.0000	0.0124	1.3400e-003	0.0000	1.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2624	2.4105	1.6180	2.3000e-003		0.1632	0.1632	0.1544	0.1544	0.1544	0.0000	212.1180	212.1180	0.0530	0.0000	213.2312
Total	0.2624	2.4105	1.6180	2.3000e-003	0.0124	0.1632	0.1756	1.3400e-003	0.1544	0.1557	0.0000	212.1180	212.1180	0.0530	0.0000	213.2312

3.2 Site Preparation - 2015
Mitigated Construction Off-Site

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
	tons/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	8.1500e-003	0.0119	0.1235	2.3000e-004	0.0184	1.9000e-004	0.0186	4.8900e-003	1.7000e-004	5.0600e-003	0.0000	18.5843	18.5843	1.1100e-003	0.0000	18.6075
Total	8.1500e-003	0.0119	0.1235	2.3000e-004	0.0184	1.9000e-004	0.0186	4.8900e-003	1.7000e-004	5.0600e-003	0.0000	18.5843	18.5843	1.1100e-003	0.0000	18.6075

3.3 Grading - 2015
Unmitigated Construction On-Site

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
	tons/yr															
Fugitive Dust					0.0739	0.0000	0.0739	0.0000	0.0000	0.0379	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0310	0.3292	0.2114	2.1000e-004		0.0180	0.0180	0.0165	0.0165	0.0165	0.0000	20.1368	20.1368	6.0100e-003	0.0000	20.2630
Total	0.0310	0.3292	0.2114	2.1000e-004	0.0739	0.0180	0.0919	0.0165	0.0165	0.0544	0.0000	20.1368	20.1368	6.0100e-003	0.0000	20.2630

3.3 Grading - 2015

Unmitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	5.2100e-003	0.0836	0.0603	1.9000e-004	4.2800e-003	1.3100e-003	5.5900e-003	1.1700e-003	1.2000e-003	2.3800e-003	0.0000	17.2443	17.2443	1.4000e-004	0.0000	17.2473
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	5.8000e-004	8.5000e-004	8.8200e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.3275	1.3275	8.0000e-005	0.0000	1.3291
Total	5.7900e-003	0.0844	0.0691	2.1000e-004	5.5900e-003	1.3200e-003	6.9200e-003	1.5200e-003	1.2100e-003	2.7400e-003	0.0000	18.5718	18.5718	2.2000e-004	0.0000	18.5764

Mitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0288	0.0000	0.0288	0.0148	0.0000	0.0148	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0310	0.3292	0.2114	2.1000e-004		0.0180	0.0180		0.0165	0.0165	0.0000	20.1368	20.1368	6.0100e-003	0.0000	20.2630
Total	0.0310	0.3292	0.2114	2.1000e-004	0.0288	0.0180	0.0468	0.0148	0.0165	0.0313	0.0000	20.1368	20.1368	6.0100e-003	0.0000	20.2630

3.3 Grading - 2015

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					CO2e
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	
Hauling	5.2100e-003	0.0836	0.0603	1.9000e-004	4.2800e-003	1.3100e-003	5.5900e-003	1.1700e-003	1.2000e-003	2.3800e-003	0.0000	17.2443	17.2443	1.4000e-004	0.0000	17.2473
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	5.8000e-004	8.5000e-004	8.8200e-003	2.0000e-005	1.3100e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.3275	1.3275	8.0000e-005	0.0000	1.3291
Total	5.7900e-003	0.0844	0.0691	2.1000e-004	5.5900e-003	1.3200e-003	6.9200e-003	1.5200e-003	1.2100e-003	2.7400e-003	0.0000	18.5718	18.5718	2.2000e-004	0.0000	18.5764

3.4 Building Construction - 2015

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					CO2e
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	
Off-Road	0.1242	0.7440	0.5176	7.6000e-004		0.0512	0.0512		0.0495	0.0495	0.0000	64.3367	64.3367	0.0148	0.0000	64.6483
Total	0.1242	0.7440	0.5176	7.6000e-004		0.0512	0.0512		0.0495	0.0495	0.0000	64.3367	64.3367	0.0148	0.0000	64.6483

3.4 Building Construction - 2015
Unmitigated Construction Off-Site

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
	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	8.8300e-003	0.0892	0.1108	1.9000e-004	5.2900e-003	1.4400e-003	6.7200e-003	1.5100e-003	1.3200e-003	2.8300e-003	0.0000	17.3583	17.3583	1.4000e-004	0.0000	17.3612
Worker	0.0107	0.0156	0.1623	3.1000e-004	0.0242	2.5000e-004	0.0244	6.4300e-003	2.3000e-004	6.6500e-003	0.0000	24.4250	24.4250	1.4500e-003	0.0000	24.4556
Total	0.0195	0.1048	0.2731	5.0000e-004	0.0295	1.6900e-003	0.0312	7.9400e-003	1.5500e-003	9.4800e-003	0.0000	41.7833	41.7833	1.5900e-003	0.0000	41.8168

Mitigated Construction On-Site

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
	tons/yr															
	MT/yr															
Off-Road	0.1242	0.7440	0.5176	7.6000e-004		0.0512	0.0512		0.0495	0.0495	0.0000	64.3366	64.3366	0.0148	0.0000	64.6482
Total	0.1242	0.7440	0.5176	7.6000e-004		0.0512	0.0512		0.0495	0.0495	0.0000	64.3366	64.3366	0.0148	0.0000	64.6482

3.4 Building Construction - 2015
Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	8.8300e-003	0.0892	0.1108	1.9000e-004	5.2900e-003	1.4400e-003	6.7200e-003	1.5100e-003	1.3200e-003	2.8300e-003	0.0000	17.3583	17.3583	1.4000e-004	0.0000	17.3612
Worker	0.0107	0.0156	0.1623	3.1000e-004	0.0242	2.5000e-004	0.0244	6.4300e-003	2.3000e-004	6.6500e-003	0.0000	24.4250	24.4250	1.4500e-003	0.0000	24.4556
Total	0.0195	0.1048	0.2731	5.0000e-004	0.0295	1.6900e-003	0.0312	7.9400e-003	1.5500e-003	9.4800e-003	0.0000	41.7833	41.7833	1.5900e-003	0.0000	41.8168

3.4 Building Construction - 2016
Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.3884	2.4244	1.7355	2.5900e-003		0.1611	0.1611		0.1555	0.1555	0.0000	219.1208	219.1208	0.0482	0.0000	220.1322
Total	0.3884	2.4244	1.7355	2.5900e-003		0.1611	0.1611		0.1555	0.1555	0.0000	219.1208	219.1208	0.0482	0.0000	220.1322

3.4 Building Construction - 2016
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr				CO2e	
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4		N2O
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	0.0265	0.2699	0.3506	6.5000e-004	0.0181	4.0500e-003	0.0222	5.1600e-003	3.7300e-003	8.8900e-003	0.0000	58.7298	58.7298	4.4000e-004	0.0000	58.7390
Worker	0.0330	0.0482	0.5023	1.0500e-003	0.0828	8.0000e-004	0.0836	0.0220	7.3000e-004	0.0227	0.0000	80.7520	80.7520	4.5800e-003	0.0000	80.8482
Total	0.0595	0.3181	0.8529	1.7000e-003	0.1008	4.8500e-003	0.1057	0.0271	4.4600e-003	0.0316	0.0000	139.4818	139.4818	5.0200e-003	0.0000	139.5872

Mitigated Construction On-Site

Category	tons/yr										MT/yr				CO2e	
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4		N2O
Off-Road	0.3884	2.4244	1.7355	2.5900e-003		0.1611	0.1611		0.1555	0.1555	0.0000	219.1205	219.1205	0.0482	0.0000	220.1319
Total	0.3884	2.4244	1.7355	2.5900e-003		0.1611	0.1611		0.1555	0.1555	0.0000	219.1205	219.1205	0.0482	0.0000	220.1319

3.4 Building Construction - 2016
Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0265	0.2699	0.3506	6.5000e-004	0.0181	4.0500e-003	0.0222	5.1600e-003	3.7300e-003	8.8900e-003	0.0000	58.7298	58.7298	4.4000e-004	0.0000	58.7390
Worker	0.0330	0.0482	0.5023	1.0500e-003	0.0828	8.0000e-004	0.0836	0.0220	7.3000e-004	0.0227	0.0000	80.7520	80.7520	4.5800e-003	0.0000	80.8482
Total	0.0595	0.3181	0.8529	1.7000e-003	0.1008	4.8500e-003	0.1057	0.0271	4.4600e-003	0.0316	0.0000	139.4818	139.4818	5.0200e-003	0.0000	139.5872

3.5 Paving - 2016
Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	9.6500e-003	0.0991	0.0682	1.0000e-004		6.0600e-003	6.0600e-003		5.5800e-003	5.5800e-003	0.0000	9.3107	9.3107	2.7600e-003	0.0000	9.3686
Paving	4.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0101	0.0991	0.0682	1.0000e-004		6.0600e-003	6.0600e-003		5.5800e-003	5.5800e-003	0.0000	9.3107	9.3107	2.7600e-003	0.0000	9.3686

3.5 Paving - 2016

Unmitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	4.3000e-004	6.2000e-004	6.4900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0426	1.0426	6.0000e-005	0.0000	1.0438
Total	4.3000e-004	6.2000e-004	6.4900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0426	1.0426	6.0000e-005	0.0000	1.0438

Mitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	9.6500e-003	0.0991	0.0682	1.0000e-004	6.0600e-003	6.0600e-003	6.0600e-003	5.5800e-003	5.5800e-003	5.5800e-003	0.0000	9.3107	9.3107	2.7600e-003	0.0000	9.3686
Paving	4.7000e-004				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	0.0101	0.0991	0.0682	1.0000e-004	6.0600e-003	6.0600e-003	6.0600e-003	5.5800e-003	5.5800e-003	5.5800e-003	0.0000	9.3107	9.3107	2.7600e-003	0.0000	9.3686

3.5 Paving - 2016

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	4.3000e-004	6.2000e-004	6.4900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0426	1.0426	6.0000e-005	0.0000	1.0438
Total	4.3000e-004	6.2000e-004	6.4900e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0426	1.0426	6.0000e-005	0.0000	1.0438

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	0.2340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0119	9.4200e-003	1.0000e-005	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798
Total	0.2358	0.0119	9.4200e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798

3.6 Architectural Coating - 2016
Unmitigated Construction Off-Site

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
	tons/yr															
	MT/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6950	0.6950	4.0000e-005	0.0000	0.6959
Total	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6950	0.6950	4.0000e-005	0.0000	0.6959

Mitigated Construction On-Site

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
	tons/yr															
	MT/yr															
Archit. Coating	0.2340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0119	9.4200e-003	1.0000e-005	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798
Total	0.2358	0.0119	9.4200e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.2766	1.2766	1.5000e-004	0.0000	1.2798

3.6 Architectural Coating - 2016
Mitigated Construction Off-Site

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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6950	0.6950	4.0000e-005	0.0000	0.6959
Total	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6950	0.6950	4.0000e-005	0.0000	0.6959

3.6 Architectural Coating - 2017
Unmitigated Construction On-Site

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
tons/yr																
Archit. Coating	0.1170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	0.1178	5.4600e-003	4.6700e-003	1.0000e-005	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397

3.6 Architectural Coating - 2017
Unmitigated Construction Off-Site

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
	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	1.9000e-004	1.9500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3345	0.3345	2.0000e-005	0.0000	0.3349
Total	1.3000e-004	1.9000e-004	1.9500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3345	0.3345	2.0000e-005	0.0000	0.3349

Mitigated Construction On-Site

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
	tons/yr															
	MT/yr															
Archit. Coating	0.1170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	0.1178	5.4600e-003	4.6700e-003	1.0000e-005	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397

3.6 Architectural Coating - 2017
Mitigated Construction Off-Site

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
	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	1.9000e-004	1.9500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3345	0.3345	2.0000e-005	0.0000	0.3349
Total	1.3000e-004	1.9000e-004	1.9500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3345	0.3345	2.0000e-005	0.0000	0.3349

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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
	tons/yr															
	MT/yr															
Mitigated	0.9372	2.4010	9.6116	0.0212	1.3919	0.0319	1.4239	0.3728	0.0294	0.4022	0.0000	1,642.6236	1,642.6236	0.0688	0.0000	1,644.0679
Unmitigated	0.9372	2.4010	9.6116	0.0212	1.3919	0.0319	1.4239	0.3728	0.0294	0.4022	0.0000	1,642.6236	1,642.6236	0.0688	0.0000	1,644.0679

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Hotel	1,462.43	1,466.01	1065.05	3,355,369	3,355,369
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	227.57	238.73	182.56	317,096	317,096
Total	1,690.00	1,704.74	1,247.61	3,672,465	3,672,465

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	H-O or C-NW	Primary	Diverted	Pass-by		
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	19.00	58	38	4		
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0.00	0	0	0		
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	19.00	38	18	44		

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.532559	0.058242	0.178229	0.125155	0.038934	0.006273	0.016761	0.032323	0.002478	0.003154	0.003685	0.000544	0.001663

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Electricity Mitigated						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	943.3962	943.3962	0.0164	3.4000e-003	944.7959
Electricity Unmitigated						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	943.3962	943.3962	0.0164	3.4000e-003	944.7959
NaturalGas Mitigated	0.0211	0.1921	0.1614	1.1500e-003		0.0146	0.0146	0.0146	0.0146	0.0000	0.0000	209.1315	209.1315	4.0100e-003	3.8300e-003	210.4043
NaturalGas Unmitigated	0.0211	0.1921	0.1614	1.1500e-003		0.0146	0.0146	0.0146	0.0146	0.0000	0.0000	209.1315	209.1315	4.0100e-003	3.8300e-003	210.4043

5.2 Energy by Land Use - NaturalGas Unmitigated

Land Use	NaturalGas Use kBTU/yr	tons/yr										MT/yr					
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hotel	3.32946e+006	0.0180	0.1632	0.1371	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.6727	177.6727	3.4100e-003	3.2600e-003	178.7540
Other Asphalt Surfaces	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	589515	3.1800e-003	0.0289	0.0243	1.7000e-004		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003	0.0000	31.4588	31.4588	6.0000e-004	5.8000e-004	31.6502
Total		0.0211	0.1921	0.1614	1.1500e-003		0.0146	0.0146		0.0146	0.0146	0.0000	209.1315	209.1315	4.0100e-003	3.8400e-003	210.4043

5.2 Energy by Land Use - NaturalGas

Mitigated

Land Use	NaturalGas Use kBTU/yr	tons/yr										MT/yr					CO2e	
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O		
Other Asphalt Surfaces	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	0.0000	0.0000
Quality Restaurant	589515	3.1800e-003	0.0289	0.0243	1.7000e-004	2.2000e-003	2.2000e-003	2.2000e-003	2.2000e-003	2.2000e-003	2.2000e-003	2.2000e-003	2.2000e-003	2.2000e-003	6.0000e-004	5.8000e-004	31.6502	
Hotel	3.32946e+006	0.0180	0.1632	0.1371	9.8000e-004	0.0124	0.0124	0.0124	0.0124	0.0124	0.0124	0.0124	0.0124	0.0124	3.4100e-003	3.2600e-003	178.7540	
Total		0.0211	0.1921	0.1614	1.1500e-003	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	0.0146	4.0100e-003	3.8400e-003	210.4043	

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use kWh/yr	MT/yr					CO2e
		Total CO2	CH4	N2O			
Hotel	1.13111e+006	853.8100	0.0149	3.0800e-003			855.0767
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000			0.0000
Quality Restaurant	118682	89.5863	1.5600e-003	3.2000e-004			89.7192
Total		943.3962	0.0164	3.4000e-003			944.7959

5.3 Energy by Land Use - Electricity

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2	CH4	N2O	CO2e
Hotel	1.13111e+006	853.8100	0.0149	3.0800e-003	855.0767
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	118682	89.5863	1.5600e-003	3.2000e-004	89.7192
Total		943.3962	0.0164	3.4000e-003	944.7959

6.0 Area Detail

6.1 Mitigation Measures Area

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
Mitigated	0.6879	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003
Unmitigated	0.6879	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003

6.2 Area by SubCategory

Unmitigated

SubCategory	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.1404					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5473					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003
Total	0.6879	2.0000e-005	2.5700e-003	0.0000		1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003

Mitigated

SubCategory	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.1404					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5473					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.5700e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003
Total	0.6879	2.0000e-005	2.5700e-003	0.0000		1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	4.9000e-003	4.9000e-003	1.0000e-005	0.0000	5.1800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	58.5033	0.1739	4.2800e-003	63.4837
Unmitigated	58.5033	0.1740	4.2900e-003	63.4864

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	4.54065 / 0.504517	50.3007	0.1488	3.6700e-003	54.5633
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.76794 / 0.0490175	8.2026	0.0252	6.2000e-004	8.9231
Total		58.5033	0.1740	4.2900e-003	63.4864

7.2 Water by Land Use

Mitigated

Land Use	Mgal	MT/yr			CO2e
		Indoor/Outdoor Use	Total CO2	CH4		N2O
Hotel	4.540657 0.504517	50.3007	0.1488	3.6600e-003	54.5610
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.767947 0.0490175	8.2026	0.0252	6.2000e-004	8.9227
Total		58.5033	0.1739	4.2800e-003	63.4837

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

Category/Year	MT/yr			CO2e
	Total CO2	CH4	N2O	
Mitigated	20.3620	1.2034	0.0000	45.6326
Unmitigated	20.3620	1.2034	0.0000	45.6326

8.2 Waste by Land Use

Unmitigated

Land Use	Waste Disposed tons	Total CO2			CO2e
		CH4	N2O	CO2e	
Hotel	98	19.8931	1.1757	0.0000	44.5818
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.31	0.4689	0.0277	0.0000	1.0509
Total		20.3620	1.2034	0.0000	45.6326

Mitigated

Land Use	Waste Disposed tons	Total CO2			CO2e
		CH4	N2O	CO2e	
Hotel	98	19.8931	1.1757	0.0000	44.5818
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	2.31	0.4689	0.0277	0.0000	1.0509
Total		20.3620	1.2034	0.0000	45.6326

9.0 Operational Offroad

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

10.0 Vegetation

This page intentionally left blank.