

Humboldt County Resource Reentry Facility Humboldt County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	54.00	1000sqft	1.24	54,000.00	0
Government Office Building	26.00	1000sqft	0.60	26,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	103
Climate Zone	1			Operational Year	2016
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - removing existing gravels and excavating for parking

Grading - .79 acres is the size of the lot, no offsite grading calculated

Woodstoves -

Sequestration -

Mobile Land Use Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	4.00	15.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	PhaseEndDate	11/27/2015	11/12/2015
tblConstructionPhase	PhaseEndDate	3/4/2015	2/20/2015
tblConstructionPhase	PhaseEndDate	1/14/2015	2/11/2015
tblConstructionPhase	PhaseStartDate	2/21/2015	2/6/2015
tblConstructionPhase	PhaseStartDate	2/12/2015	1/31/2015
tblConstructionPhase	PhaseStartDate	1/1/2015	1/29/2015
tblGrading	AcresOfGrading	5.63	0.79
tblGrading	AcresOfGrading	5.00	0.79
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4052	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5100e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	375.1933	375.1933	0.0147	4.3000e-003	376.8340
Mobile	2.5145	5.3401	22.2598	0.0240	1.5519	0.0600	1.6120	0.4180	0.0552	0.4732	0.0000	1,914.8813	1,914.8813	0.1161	0.0000	1,917.3203
Waste						0.0000	0.0000		0.0000	0.0000	67.3889	0.0000	67.3889	3.9826	0.0000	151.0230
Water						0.0000	0.0000		0.0000	0.0000	5.0420	34.9351	39.9771	0.5195	0.0126	54.7775
Total	2.9286	5.4208	22.3283	0.0245	1.5519	0.0662	1.6181	0.4180	0.0613	0.4794	72.4310	2,325.0112	2,397.4422	4.6328	0.0169	2,499.9562

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4052	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5100e-003
Energy	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	375.1933	375.1933	0.0147	4.3000e-003	376.8340
Mobile	2.4993	5.2328	21.9736	0.0235	1.5131	0.0587	1.5718	0.4076	0.0539	0.4615	0.0000	1,869.1951	1,869.1951	0.1138	0.0000	1,871.5858
Waste						0.0000	0.0000		0.0000	0.0000	67.3889	0.0000	67.3889	3.9826	0.0000	151.0230
Water						0.0000	0.0000		0.0000	0.0000	4.4189	31.8430	36.2618	0.4552	0.0110	49.2305
Total	2.9133	5.3134	22.0421	0.0239	1.5131	0.0648	1.5779	0.4076	0.0601	0.4677	71.8078	2,276.2328	2,348.0406	4.5663	0.0153	2,448.6747

	ROG	NOx	CO	SO2	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	0.52	1.98	1.28	2.33	2.50	2.06	2.48	2.50	2.06	2.44	0.86	2.10	2.06	1.44	9.20	2.05

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	1/1/2015	12/31/2014	5	0	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	1/31/2015	2/20/2015	5	15	
4	Building Construction	Building Construction	2/6/2015	11/12/2015	5	200	
5	Paving	Paving	11/13/2015	11/26/2015	5	10	
6	Architectural Coating	Architectural Coating	11/27/2015	12/10/2015	5	10	

Acres of Grading (Site Preparation Phase): 0.79

Acres of Grading (Grading Phase): 0.79

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 120,000; Non-Residential Outdoor: 40,000 (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	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
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
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	26.00	13.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2015

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					0.0268	0.0000	0.0268	0.0145	0.0000	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1344	0.0851	9.0000e-005		7.3400e-003	7.3400e-003		6.7500e-003	6.7500e-003	0.0000	8.1726	8.1726	2.4400e-003	0.0000	8.2238
Total	0.0127	0.1344	0.0851	9.0000e-005	0.0268	7.3400e-003	0.0341	0.0145	6.7500e-003	0.0213	0.0000	8.1726	8.1726	2.4400e-003	0.0000	8.2238

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.7000e-004	3.1100e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2845	0.2845	2.0000e-005	0.0000	0.2850
Total	2.6000e-004	3.7000e-004	3.1100e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2845	0.2845	2.0000e-005	0.0000	0.2850

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					0.0268	0.0000	0.0268	0.0145	0.0000	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1344	0.0851	9.0000e-005		7.3400e-003	7.3400e-003		6.7500e-003	6.7500e-003	0.0000	8.1726	8.1726	2.4400e-003	0.0000	8.2238
Total	0.0127	0.1344	0.0851	9.0000e-005	0.0268	7.3400e-003	0.0341	0.0145	6.7500e-003	0.0213	0.0000	8.1726	8.1726	2.4400e-003	0.0000	8.2238

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.7000e-004	3.1100e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2845	0.2845	2.0000e-005	0.0000	0.2850
Total	2.6000e-004	3.7000e-004	3.1100e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2845	0.2845	2.0000e-005	0.0000	0.2850

3.4 Grading - 2015

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					0.0343	0.0000	0.0343	0.0187	0.0000	0.0187	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1646	0.1057	1.1000e-004		8.9800e-003	8.9800e-003		8.2600e-003	8.2600e-003	0.0000	10.0684	10.0684	3.0100e-003	0.0000	10.1315
Total	0.0155	0.1646	0.1057	1.1000e-004	0.0343	8.9800e-003	0.0433	0.0187	8.2600e-003	0.0269	0.0000	10.0684	10.0684	3.0100e-003	0.0000	10.1315

3.4 Grading - 2015

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	3.9000e-004	5.5000e-004	4.6600e-003	1.0000e-005	4.6000e-004	1.0000e-005	4.7000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.4268	0.4268	3.0000e-005	0.0000	0.4275
Total	3.9000e-004	5.5000e-004	4.6600e-003	1.0000e-005	4.6000e-004	1.0000e-005	4.7000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.4268	0.4268	3.0000e-005	0.0000	0.4275

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					0.0343	0.0000	0.0343	0.0187	0.0000	0.0187	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1646	0.1057	1.1000e-004		8.9800e-003	8.9800e-003		8.2600e-003	8.2600e-003	0.0000	10.0684	10.0684	3.0100e-003	0.0000	10.1315
Total	0.0155	0.1646	0.1057	1.1000e-004	0.0343	8.9800e-003	0.0433	0.0187	8.2600e-003	0.0269	0.0000	10.0684	10.0684	3.0100e-003	0.0000	10.1315

3.4 Grading - 2015

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	3.9000e-004	5.5000e-004	4.6600e-003	1.0000e-005	4.6000e-004	1.0000e-005	4.7000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.4268	0.4268	3.0000e-005	0.0000	0.4275
Total	3.9000e-004	5.5000e-004	4.6600e-003	1.0000e-005	4.6000e-004	1.0000e-005	4.7000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.4268	0.4268	3.0000e-005	0.0000	0.4275

3.5 Building Construction - 2015

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	0.3600	2.1564	1.5004	2.2000e-003		0.1485	0.1485		0.1434	0.1434	0.0000	186.4831	186.4831	0.0430	0.0000	187.3864
Total	0.3600	2.1564	1.5004	2.2000e-003		0.1485	0.1485		0.1434	0.1434	0.0000	186.4831	186.4831	0.0430	0.0000	187.3864

3.5 Building Construction - 2015

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	0.0280	0.1693	0.2927	3.1000e-004	8.1500e-003	3.1900e-003	0.0113	2.3400e-003	2.9300e-003	5.2700e-003	0.0000	28.1993	28.1993	3.0000e-004	0.0000	28.2056
Worker	0.0168	0.0240	0.2020	2.4000e-004	0.0201	2.2000e-004	0.0203	5.3400e-003	2.0000e-004	5.5500e-003	0.0000	18.4939	18.4939	1.5100e-003	0.0000	18.5256
Total	0.0448	0.1933	0.4947	5.5000e-004	0.0282	3.4100e-003	0.0316	7.6800e-003	3.1300e-003	0.0108	0.0000	46.6932	46.6932	1.8100e-003	0.0000	46.7311

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	0.3600	2.1564	1.5004	2.2000e-003		0.1485	0.1485		0.1434	0.1434	0.0000	186.4829	186.4829	0.0430	0.0000	187.3862
Total	0.3600	2.1564	1.5004	2.2000e-003		0.1485	0.1485		0.1434	0.1434	0.0000	186.4829	186.4829	0.0430	0.0000	187.3862

3.5 Building Construction - 2015

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	0.0280	0.1693	0.2927	3.1000e-004	8.1500e-003	3.1900e-003	0.0113	2.3400e-003	2.9300e-003	5.2700e-003	0.0000	28.1993	28.1993	3.0000e-004	0.0000	28.2056
Worker	0.0168	0.0240	0.2020	2.4000e-004	0.0201	2.2000e-004	0.0203	5.3400e-003	2.0000e-004	5.5500e-003	0.0000	18.4939	18.4939	1.5100e-003	0.0000	18.5256
Total	0.0448	0.1933	0.4947	5.5000e-004	0.0282	3.4100e-003	0.0316	7.6800e-003	3.1300e-003	0.0108	0.0000	46.6932	46.6932	1.8100e-003	0.0000	46.7311

3.6 Paving - 2015

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	7.0200e-003	0.0730	0.0459	7.0000e-005		4.4600e-003	4.4600e-003		4.1100e-003	4.1100e-003	0.0000	6.2708	6.2708	1.8400e-003	0.0000	6.3094
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.0200e-003	0.0730	0.0459	7.0000e-005		4.4600e-003	4.4600e-003		4.1100e-003	4.1100e-003	0.0000	6.2708	6.2708	1.8400e-003	0.0000	6.3094

3.6 Paving - 2015

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	4.2000e-004	6.0000e-004	5.0500e-003	1.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	0.4624	0.4624	4.0000e-005	0.0000	0.4631
Total	4.2000e-004	6.0000e-004	5.0500e-003	1.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	0.4624	0.4624	4.0000e-005	0.0000	0.4631

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	7.0200e-003	0.0730	0.0459	7.0000e-005		4.4600e-003	4.4600e-003		4.1100e-003	4.1100e-003	0.0000	6.2708	6.2708	1.8400e-003	0.0000	6.3094
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.0200e-003	0.0730	0.0459	7.0000e-005		4.4600e-003	4.4600e-003		4.1100e-003	4.1100e-003	0.0000	6.2708	6.2708	1.8400e-003	0.0000	6.3094

3.6 Paving - 2015

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	4.2000e-004	6.0000e-004	5.0500e-003	1.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	0.4624	0.4624	4.0000e-005	0.0000	0.4631
Total	4.2000e-004	6.0000e-004	5.0500e-003	1.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	0.4624	0.4624	4.0000e-005	0.0000	0.4631

3.7 Architectural Coating - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0300e-003	0.0129	9.5100e-003	1.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	1.2766	1.2766	1.7000e-004	0.0000	1.2801
Total	0.9290	0.0129	9.5100e-003	1.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	1.2766	1.2766	1.7000e-004	0.0000	1.2801

3.7 Architectural Coating - 2015

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	1.6000e-004	2.3000e-004	1.9400e-003	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1778	0.1778	1.0000e-005	0.0000	0.1781
Total	1.6000e-004	2.3000e-004	1.9400e-003	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1778	0.1778	1.0000e-005	0.0000	0.1781

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0300e-003	0.0129	9.5100e-003	1.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	1.2766	1.2766	1.7000e-004	0.0000	1.2801
Total	0.9290	0.0129	9.5100e-003	1.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	1.2766	1.2766	1.7000e-004	0.0000	1.2801

3.7 Architectural Coating - 2015

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	1.6000e-004	2.3000e-004	1.9400e-003	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1778	0.1778	1.0000e-005	0.0000	0.1781
Total	1.6000e-004	2.3000e-004	1.9400e-003	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1778	0.1778	1.0000e-005	0.0000	0.1781

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Limit Parking Supply

	ROG	NOx	CO	SO2	Fugitive 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	2.4993	5.2328	21.9736	0.0235	1.5131	0.0587	1.5718	0.4076	0.0539	0.4615	0.0000	1,869.195 1	1,869.195 1	0.1138	0.0000	1,871.585 8
Unmitigated	2.5145	5.3401	22.2598	0.0240	1.5519	0.0600	1.6120	0.4180	0.0552	0.4732	0.0000	1,914.881 3	1,914.881 3	0.1161	0.0000	1,917.320 3

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government (Civic Center)	1,507.68	0.00	0.00	2,058,669	2,007,202
Government Office Building	1,792.18	0.00	0.00	2,195,267	2,140,386
Total	3,299.86	0.00	0.00	4,253,937	4,147,588

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
Government (Civic Center)	9.50	7.30	7.30	75.00	20.00	5.00	50	34	16
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.425675	0.106442	0.174438	0.131699	0.086003	0.009122	0.013797	0.036792	0.002239	0.001601	0.007858	0.001304	0.003030

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	287.4205	287.4205	0.0130	2.6900e-003	288.5270
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	287.4205	287.4205	0.0130	2.6900e-003	288.5270
NaturalGas Mitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7728	87.7728	1.6800e-003	1.6100e-003	88.3070
NaturalGas Unmitigated	8.8700e-003	0.0806	0.0677	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7728	87.7728	1.6800e-003	1.6100e-003	88.3070

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					
Government (Civic Center)	1.11024e+006	5.9900e-003	0.0544	0.0457	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	59.2466	59.2466	1.1400e-003	1.0900e-003	59.6072
Government Office Building	534560	2.8800e-003	0.0262	0.0220	1.6000e-004		1.9900e-003	1.9900e-003		1.9900e-003	1.9900e-003	0.0000	28.5262	28.5262	5.5000e-004	5.2000e-004	28.6998
Total		8.8700e-003	0.0806	0.0677	4.9000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7728	87.7728	1.6900e-003	1.6100e-003	88.3070

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					
Government Office Building	534560	2.8800e-003	0.0262	0.0220	1.6000e-004		1.9900e-003	1.9900e-003		1.9900e-003	1.9900e-003	0.0000	28.5262	28.5262	5.5000e-004	5.2000e-004	28.6998
Government (Civic Center)	1.11024e+006	5.9900e-003	0.0544	0.0457	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	59.2466	59.2466	1.1400e-003	1.0900e-003	59.6072
Total		8.8700e-003	0.0806	0.0677	4.9000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7728	87.7728	1.6900e-003	1.6100e-003	88.3070

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government (Civic Center)	666900	194.0089	8.7700e-003	1.8200e-003	194.7557
Government Office Building	321100	93.4117	4.2200e-003	8.7000e-004	93.7713
Total		287.4205	0.0130	2.6900e-003	288.5270

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government (Civic Center)	666900	194.0089	8.7700e-003	1.8200e-003	194.7557
Government Office Building	321100	93.4117	4.2200e-003	8.7000e-004	93.7713
Total		287.4205	0.0130	2.6900e-003	288.5270

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4052	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5100e-003
Unmitigated	0.4052	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5100e-003

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	0.0927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3124					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5100e-003
Total	0.4052	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5100e-003

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	0.0927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3124					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5100e-003
Total	0.4052	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5100e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	36.2618	0.4552	0.0110	49.2305
Unmitigated	39.9771	0.5195	0.0126	54.7775

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government (Civic Center)	10.7276 / 6.57499	26.9846	0.3506	8.4700e-003	36.9748
Government Office Building	5.16515 / 3.16574	12.9926	0.1688	4.0800e-003	17.8027
Total		39.9771	0.5195	0.0126	54.7775

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government (Civic Center)	9.40169 / 6.57499	24.4767	0.3073	7.4200e-003	33.2306
Government Office Building	4.52674 / 3.16574	11.7851	0.1479	3.5700e-003	15.9999
Total		36.2618	0.4552	0.0110	49.2305

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	67.3889	3.9826	0.0000	151.0230
Unmitigated	67.3889	3.9826	0.0000	151.0230

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	307.8	62.4806	3.6925	0.0000	140.0231
Government Office Building	24.18	4.9083	0.2901	0.0000	10.9999
Total		67.3889	3.9826	0.0000	151.0230

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	307.8	62.4806	3.6925	0.0000	140.0231
Government Office Building	24.18	4.9083	0.2901	0.0000	10.9999
Total		67.3889	3.9826	0.0000	151.0230

9.0 Operational Offroad

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