

Clayton Silver Oak Estates
Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	198.00	Space	1.78	79,200.00	0
Condo/Townhouse	52.00	Dwelling Unit	3.25	52,000.00	149
Single Family Housing	7.00	Dwelling Unit	2.27	12,600.00	20

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2016
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - based on info from applicant

Architectural Coating - project required to use low VOC paints per PCAPCD rules and regulations

Vehicle Trips - based on traffic report

Woodstoves - project would not use woodstoves per PCAPCD rules and regulations

Area Coating - project required to use low VOC paints per PCAPCD rules and regulations

Grading - total project site = 14 acres

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	100
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	150
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	20.00	90.00
tblConstructionPhase	NumDays	230.00	395.00
tblConstructionPhase	NumDays	20.00	395.00
tblConstructionPhase	PhaseEndDate	12/15/2017	6/24/2016
tblConstructionPhase	PhaseStartDate	6/11/2016	12/20/2014
tblGrading	AcresOfGrading	45.00	14.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	ST_TR	7.16	9.52
tblVehicleTrips	ST_TR	10.08	9.52
tblVehicleTrips	SU_TR	6.07	9.52
tblVehicleTrips	SU_TR	8.77	9.52
tblVehicleTrips	WD_TR	6.59	9.52
tblVehicleTrips	WD_TR	9.57	9.52
tblWoodstoves	NumberCatalytic	1.04	0.00
tblWoodstoves	NumberCatalytic	0.25	0.00
tblWoodstoves	NumberNoncatalytic	1.04	0.00
tblWoodstoves	NumberNoncatalytic	0.25	0.00
tblWoodstoves	WoodstoveWoodMass	954.80	0.00
tblWoodstoves	WoodstoveWoodMass	1,355.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014											0.0000	283.1780	283.1780	0.0765	0.0000	284.7847
2015											0.0000	503.8715	503.8715	0.0904	0.0000	505.7705
2016											0.0000	222.9995	222.9995	0.0393	0.0000	223.8242
Total											0.0000	1,010.0489	1,010.0489	0.2062	0.0000	1,014.3794

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014											0.0000	283.1776	283.1776	0.0765	0.0000	284.7844
2015											0.0000	503.8711	503.8711	0.0904	0.0000	505.7701
2016											0.0000	222.9993	222.9993	0.0393	0.0000	223.8240
Total											0.0000	1,010.0480	1,010.0480	0.2062	0.0000	1,014.3784

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

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											1.1006	2.3655	3.4661	7.7000e-004	1.3000e-004	3.5217
Energy											0.0000	179.4428	179.4428	5.8100e-003	2.1700e-003	180.2365
Mobile											0.0000	531.7293	531.7293	0.0235	0.0000	532.2221
Waste											6.5607	0.0000	6.5607	0.3877	0.0000	14.7029
Water											1.2196	9.5698	10.7893	0.1256	3.0400e-003	14.3694
Total											8.8808	723.1073	731.9881	0.5434	5.3400e-003	745.0526

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											1.1006	2.3655	3.4661	7.7000e-004	1.3000e-004	3.5217
Energy											0.0000	179.4428	179.4428	5.8100e-003	2.1700e-003	180.2365
Mobile											0.0000	531.7293	531.7293	0.0235	0.0000	532.2221
Waste											6.5607	0.0000	6.5607	0.3877	0.0000	14.7029
Water											1.2196	9.5698	10.7893	0.1256	3.0300e-003	14.3675
Total											8.8808	723.1073	731.9881	0.5434	5.3300e-003	745.0506

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2014	5/30/2014	5	22	
2	Site Prep	Site Preparation	5/31/2014	7/4/2014	5	25	
3	Grading	Grading	7/5/2014	11/7/2014	5	90	
4	Paving	Paving	11/8/2014	12/5/2014	5	20	
5	Bldg Const	Building Construction	12/6/2014	6/10/2016	5	395	
6	Arch Coat	Architectural Coating	12/20/2014	6/24/2016	5	395	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 14

Acres of Paving: 0

Residential Indoor: 130,815; Residential Outdoor: 43,605; Non-Residential Indoor: 3,564; Non-Residential Outdoor: 1,188 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Arch Coat	Air Compressors	1	6.00	78	0.48
Bldg Const	Cranes	1	7.00	226	0.29
Grading	Excavators	1	8.00	162	0.38
Bldg Const	Forklifts	3	8.00	89	0.20
Bldg Const	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	174	0.41
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Site Prep	Rubber Tired Dozers	3	8.00	255	0.40
Bldg Const	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Bldg Const	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Arch Coat	1	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Bldg Const	9	73.00	19.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Prep	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

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											0.0000	41.5536	41.5536	0.0112	0.0000	41.7894
Total											0.0000	41.5536	41.5536	0.0112	0.0000	41.7894

3.2 Demolition - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4540	1.4540	9.0000e-005	0.0000	1.4559
Total											0.0000	1.4540	1.4540	9.0000e-005	0.0000	1.4559

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											0.0000	41.5535	41.5535	0.0112	0.0000	41.7893
Total											0.0000	41.5535	41.5535	0.0112	0.0000	41.7893

3.2 Demolition - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4540	1.4540	9.0000e-005	0.0000	1.4559
Total											0.0000	1.4540	1.4540	9.0000e-005	0.0000	1.4559

3.3 Site Prep - 2014

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	47.1270	47.1270	0.0139	0.0000	47.4195
Total											0.0000	47.1270	47.1270	0.0139	0.0000	47.4195

3.3 Site Prep - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.9827	1.9827	1.2000e-004	0.0000	1.9853
Total											0.0000	1.9827	1.9827	1.2000e-004	0.0000	1.9853

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	47.1270	47.1270	0.0139	0.0000	47.4194
Total											0.0000	47.1270	47.1270	0.0139	0.0000	47.4194

3.3 Site Prep - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.9827	1.9827	1.2000e-004	0.0000	1.9853
Total											0.0000	1.9827	1.9827	1.2000e-004	0.0000	1.9853

3.4 Grading - 2014

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	129.1007	129.1007	0.0382	0.0000	129.9019
Total											0.0000	129.1007	129.1007	0.0382	0.0000	129.9019

3.4 Grading - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.9481	5.9481	3.7000e-004	0.0000	5.9558
Total											0.0000	5.9481	5.9481	3.7000e-004	0.0000	5.9558

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	129.1006	129.1006	0.0382	0.0000	129.9017
Total											0.0000	129.1006	129.1006	0.0382	0.0000	129.9017

3.4 Grading - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.9481	5.9481	3.7000e-004	0.0000	5.9558
Total											0.0000	5.9481	5.9481	3.7000e-004	0.0000	5.9558

3.5 Paving - 2014

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											0.0000	21.4412	21.4412	6.3400e-003	0.0000	21.5743
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	21.4412	21.4412	6.3400e-003	0.0000	21.5743

3.5 Paving - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.3218	1.3218	8.0000e-005	0.0000	1.3235
Total											0.0000	1.3218	1.3218	8.0000e-005	0.0000	1.3235

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											0.0000	21.4412	21.4412	6.3400e-003	0.0000	21.5743
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	21.4412	21.4412	6.3400e-003	0.0000	21.5743

3.5 Paving - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.3218	1.3218	8.0000e-005	0.0000	1.3235
Total											0.0000	1.3218	1.3218	8.0000e-005	0.0000	1.3235

3.6 Bldg Const - 2014

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											0.0000	22.1197	22.1197	5.6200e-003	0.0000	22.2378
Total											0.0000	22.1197	22.1197	5.6200e-003	0.0000	22.2378

3.6 Bldg Const - 2014

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
Vendor											0.0000	3.7898	3.7898	4.0000e-005	0.0000	3.7906
Worker											0.0000	5.7894	5.7894	3.6000e-004	0.0000	5.7970
Total											0.0000	9.5792	9.5792	4.0000e-004	0.0000	9.5876

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											0.0000	22.1197	22.1197	5.6200e-003	0.0000	22.2378
Total											0.0000	22.1197	22.1197	5.6200e-003	0.0000	22.2378

3.6 Bldg Const - 2014

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
Vendor											0.0000	3.7898	3.7898	4.0000e-005	0.0000	3.7906
Worker											0.0000	5.7894	5.7894	3.6000e-004	0.0000	5.7970
Total											0.0000	9.5792	9.5792	4.0000e-004	0.0000	9.5876

3.6 Bldg Const - 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											0.0000	318.4126	318.4126	0.0799	0.0000	320.0903
Total											0.0000	318.4126	318.4126	0.0799	0.0000	320.0903

3.6 Bldg Const - 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
Vendor											0.0000	54.2519	54.2519	4.9000e-004	0.0000	54.2621
Worker											0.0000	81.2018	81.2018	4.7400e-003	0.0000	81.3013
Total											0.0000	135.4536	135.4536	5.2300e-003	0.0000	135.5634

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											0.0000	318.4122	318.4122	0.0799	0.0000	320.0899
Total											0.0000	318.4122	318.4122	0.0799	0.0000	320.0899

3.6 Bldg Const - 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
Vendor											0.0000	54.2519	54.2519	4.9000e-004	0.0000	54.2621
Worker											0.0000	81.2018	81.2018	4.7400e-003	0.0000	81.3013
Total											0.0000	135.4536	135.4536	5.2300e-003	0.0000	135.5634

3.6 Bldg Const - 2016

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											0.0000	140.4491	140.4491	0.0348	0.0000	141.1806
Total											0.0000	140.4491	140.4491	0.0348	0.0000	141.1806

3.6 Bldg Const - 2016

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
Vendor											0.0000	23.8318	23.8318	1.9000e-004	0.0000	23.8358
Worker											0.0000	34.8540	34.8540	1.9200e-003	0.0000	34.8943
Total											0.0000	58.6857	58.6857	2.1100e-003	0.0000	58.7301

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											0.0000	140.4489	140.4489	0.0348	0.0000	141.1804
Total											0.0000	140.4489	140.4489	0.0348	0.0000	141.1804

3.6 Bldg Const - 2016

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
Vendor											0.0000	23.8318	23.8318	1.9000e-004	0.0000	23.8358
Worker											0.0000	34.8540	34.8540	1.9200e-003	0.0000	34.8943
Total											0.0000	58.6857	58.6857	2.1100e-003	0.0000	58.7301

3.7 Arch Coat - 2014

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.0213	1.0213	1.5000e-004	0.0000	1.0244
Total											0.0000	1.0213	1.0213	1.5000e-004	0.0000	1.0244

3.7 Arch Coat - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5287	0.5287	3.0000e-005	0.0000	0.5294
Total											0.0000	0.5287	0.5287	3.0000e-005	0.0000	0.5294

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.0213	1.0213	1.5000e-004	0.0000	1.0244
Total											0.0000	1.0213	1.0213	1.5000e-004	0.0000	1.0244

3.7 Arch Coat - 2014

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5287	0.5287	3.0000e-005	0.0000	0.5294
Total											0.0000	0.5287	0.5287	3.0000e-005	0.0000	0.5294

3.7 Arch Coat - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.3200	33.3200	4.3400e-003	0.0000	33.4111
Total											0.0000	33.3200	33.3200	4.3400e-003	0.0000	33.4111

3.7 Arch Coat - 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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	16.6853	16.6853	9.7000e-004	0.0000	16.7058
Total											0.0000	16.6853	16.6853	9.7000e-004	0.0000	16.7058

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	33.3199	33.3199	4.3400e-003	0.0000	33.4110
Total											0.0000	33.3199	33.3199	4.3400e-003	0.0000	33.4110

3.7 Arch Coat - 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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	16.6853	16.6853	9.7000e-004	0.0000	16.7058
Total											0.0000	16.6853	16.6853	9.7000e-004	0.0000	16.7058

3.7 Arch Coat - 2016

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.0855	16.0855	1.9000e-003	0.0000	16.1253
Total											0.0000	16.0855	16.0855	1.9000e-003	0.0000	16.1253

3.7 Arch Coat - 2016

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	7.7792	7.7792	4.3000e-004	0.0000	7.7882
Total											0.0000	7.7792	7.7792	4.3000e-004	0.0000	7.7882

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	16.0855	16.0855	1.9000e-003	0.0000	16.1253
Total											0.0000	16.0855	16.0855	1.9000e-003	0.0000	16.1253

3.7 Arch Coat - 2016

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	7.7792	7.7792	4.3000e-004	0.0000	7.7882
Total											0.0000	7.7792	7.7792	4.3000e-004	0.0000	7.7882

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	531.7293	531.7293	0.0235	0.0000	532.2221
Unmitigated											0.0000	531.7293	531.7293	0.0235	0.0000	532.2221

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	495.04	495.04	495.04	1,105,110	1,105,110
Parking Lot	0.00	0.00	0.00		
Single Family Housing	66.64	66.64	66.64	148,765	148,765
Total	561.68	561.68	561.68	1,253,875	1,253,875

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
Condo/Townhouse	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546434	0.062864	0.174629	0.123506	0.034170	0.004889	0.015456	0.023695	0.002073	0.003288	0.006639	0.000690	0.001668

5.0 Energy Detail

5.1 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	112.2225	112.2225	4.5200e-003	9.3000e-004	112.6071
Electricity Unmitigated											0.0000	112.2225	112.2225	4.5200e-003	9.3000e-004	112.6071
NaturalGas Mitigated											0.0000	67.2203	67.2203	1.2900e-003	1.2300e-003	67.6294
NaturalGas Unmitigated											0.0000	67.2203	67.2203	1.2900e-003	1.2300e-003	67.6294

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					
Condo/Townhouse	1.01268e+006											0.0000	54.0405	54.0405	1.0400e-003	9.9000e-004	54.3693
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	246981											0.0000	13.1798	13.1798	2.5000e-004	2.4000e-004	13.2600
Total												0.0000	67.2203	67.2203	1.2900e-003	1.2300e-003	67.6294

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					
Condo/Townhouse	1.01268e+006											0.0000	54.0405	54.0405	1.0400e-003	9.9000e-004	54.3693
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	246981											0.0000	13.1798	13.1798	2.5000e-004	2.4000e-004	13.2600
Total												0.0000	67.2203	67.2203	1.2900e-003	1.2300e-003	67.6294

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	224182	73.2648	2.9500e-003	6.1000e-004	73.5158
Parking Lot	69696	22.7773	9.2000e-004	1.9000e-004	22.8553
Single Family Housing	49510.6	16.1805	6.5000e-004	1.3000e-004	16.2359
Total		112.2225	4.5200e-003	9.3000e-004	112.6071

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	224182	73.2648	2.9500e-003	6.1000e-004	73.5158
Parking Lot	69696	22.7773	9.2000e-004	1.9000e-004	22.8553
Single Family Housing	49510.6	16.1805	6.5000e-004	1.3000e-004	16.2359
Total		112.2225	4.5200e-003	9.3000e-004	112.6071

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											1.1006	2.3655	3.4661	7.7000e-004	1.3000e-004	3.5217
Unmitigated											1.1006	2.3655	3.4661	7.7000e-004	1.3000e-004	3.5217

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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.1006	1.6463	2.7469	3.0000e-005	1.3000e-004	2.7870
Landscaping											0.0000	0.7191	0.7191	7.4000e-004	0.0000	0.7347
Total											1.1006	2.3655	3.4661	7.7000e-004	1.3000e-004	3.5217

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.1006	1.6463	2.7469	3.0000e-005	1.3000e-004	2.7870
Landscaping											0.0000	0.7191	0.7191	7.4000e-004	0.0000	0.7347
Total											1.1006	2.3655	3.4661	7.7000e-004	1.3000e-004	3.5217

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.7893	0.1256	3.0300e-003	14.3675
Unmitigated	10.7893	0.1256	3.0400e-003	14.3694

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	3.38801 / 2.13592	9.5092	0.1107	2.6800e-003	12.6646
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.456078 / 0.287528	1.2801	0.0149	3.6000e-004	1.7049
Total		10.7893	0.1257	3.0400e-003	14.3694

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	3.38801 / 2.13592	9.5092	0.1107	2.6700e-003	12.6629
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.456078 / 0.287528	1.2801	0.0149	3.6000e-004	1.7046
Total		10.7893	0.1256	3.0300e-003	14.3675

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.5607	0.3877	0.0000	14.7029
Unmitigated	6.5607	0.3877	0.0000	14.7029

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	23.92	4.8555	0.2870	0.0000	10.8816
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	8.4	1.7051	0.1008	0.0000	3.8213
Total		6.5607	0.3877	0.0000	14.7029

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	23.92	4.8555	0.2870	0.0000	10.8816
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	8.4	1.7051	0.1008	0.0000	3.8213
Total		6.5607	0.3877	0.0000	14.7029

9.0 Operational Offroad

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