APPENDIX B

AIR QUALITY MODELING RESULTS, GREENHOUSE GAS CALCULATIONS, & WAVE UPRUSH STUDY

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AIR QUALITY MODELING OUTPUTS

CalEEMod Calculations

Existing (No Build) Conditions

Belmont Pool - Existing

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Recreational Swimming Pool	18.15	1000sqft	0.42	18,150.00	0
Health Club	45.60	1000sqft	1.05	45,600.00	0
Other Non-Asphalt Surfaces	4.14	Acre	4.14	180,338.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2015
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**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 - Existing scenario, no construction

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	20.87	8.82

tblVehicleTrips	ST_TR	20.87	8.82
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	WD_TR	32.93	13.92
tblVehicleTrips	WD_TR	32.93	13.92

2.0 Emissions Summary

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**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	lb/day										lb/day					
Area	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Mobile	3.2085	7.4169	31.6578	0.0630	4.1818	0.1056	4.2874	1.1171	0.0970	1.2141		5,680.2122	5,680.2122	0.2447		5,685.3510
Total	**9.6211**	**7.6820**	**31.8876**	**0.0646**	**4.1818**	**0.1258**	**4.3075**	**1.1171**	**0.1172**	**1.2343**		**5,998.2880**	**5,998.2880**	**0.2508**	**5.8300e-003**	**6,005.3633**

Mitigated Operational

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

Category	lb/day											lb/day				
Area	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Mobile	3.2085	7.4169	31.6578	0.0630	4.1818	0.1056	4.2874	1.1171	0.0970	1.2141		5,680.2122	5,680.2122	0.2447		5,685.3510
Total	**9.6211**	**7.6820**	**31.8876**	**0.0646**	**4.1818**	**0.1258**	**4.3075**	**1.1171**	**0.1172**	**1.2343**		**5,998.2880**	**5,998.2880**	**0.2508**	**5.8300e-003**	**6,005.3633**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	Site Preparation	Site Preparation	1/1/2015	12/31/2014	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	3.2085	7.4169	31.6578	0.0630	4.1818	0.1056	4.2874	1.1171	0.0970	1.2141		5,680.2122	5,680.2122	0.2447		5,685.3510
Mitigated	3.2085	7.4169	31.6578	0.0630	4.1818	0.1056	4.2874	1.1171	0.0970	1.2141		5,680.2122	5,680.2122	0.2447		5,685.3510

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	634.75	402.19	515.28	1,250,030	1,250,030
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	252.65	160.08	205.10	566,576	566,576
Total	887.40	562.28	720.38	1,816,606	1,816,606

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515437	0.060435	0.179988	0.139880	0.041945	0.006639	0.015487	0.028746	0.001918	0.002517	0.004333	0.000596	0.002079

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
NaturalGas Unmitigated	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

Land Use	kBTU/yr	lb/day										lb/day					
Health Club	2703.52	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Other Non-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
Recreational Swimming Pool	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
Total		**0.0292**	**0.2651**	**0.2226**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**318.0609**	**318.0609**	**6.1000e-003**	**5.8300e-003**	**319.9966**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	2.70352	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Other Non-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
Recreational Swimming Pool	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
Total		**0.0292**	**0.2651**	**0.2226**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**318.0609**	**318.0609**	**6.1000e-003**	**5.8300e-003**	**319.9966**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Unmitigated	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Mitigated	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**6.3835**	**7.0000e-005**	**7.1700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**6.3835**	**7.0000e-005**	**7.1700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Belmont Pool - Existing

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Recreational Swimming Pool	18.15	1000sqft	0.42	18,150.00	0
Health Club	45.60	1000sqft	1.05	45,600.00	0
Other Non-Asphalt Surfaces	4.14	Acre	4.14	180,338.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2015
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**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 - Existing scenario, no construction

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	20.87	8.82

tblVehicleTrips	ST_TR	20.87	8.82
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	WD_TR	32.93	13.92
tblVehicleTrips	WD_TR	32.93	13.92

2.0 Emissions Summary

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**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	lb/day										lb/day					
Area	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Mobile	3.3507	7.7897	31.8552	0.0598	4.1818	0.1064	4.2882	1.1171	0.0978	1.2149		5,402.5671	5,402.5671	0.2449		5,407.7107
Total	**9.7633**	**8.0548**	**32.0850**	**0.0614**	**4.1818**	**0.1266**	**4.3084**	**1.1171**	**0.1179**	**1.2351**		**5,720.6429**	**5,720.6429**	**0.2511**	**5.8300e-003**	**5,727.7231**

Mitigated Operational

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

Category	lb/day										lb/day					
Area	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Mobile	3.3507	7.7897	31.8552	0.0598	4.1818	0.1064	4.2882	1.1171	0.0978	1.2149		5,402.5671	5,402.5671	0.2449		5,407.7107
Total	**9.7633**	**8.0548**	**32.0850**	**0.0614**	**4.1818**	**0.1266**	**4.3084**	**1.1171**	**0.1179**	**1.2351**		**5,720.6429**	**5,720.6429**	**0.2511**	**5.8300e-003**	**5,727.7231**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	Site Preparation	Site Preparation	1/1/2015	12/31/2014	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	3.3507	7.7897	31.8552	0.0598	4.1818	0.1064	4.2882	1.1171	0.0978	1.2149		5,402.5671	5,402.5671	0.2449		5,407.7107
Mitigated	3.3507	7.7897	31.8552	0.0598	4.1818	0.1064	4.2882	1.1171	0.0978	1.2149		5,402.5671	5,402.5671	0.2449		5,407.7107

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	634.75	402.19	515.28	1,250,030	1,250,030
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	252.65	160.08	205.10	566,576	566,576
Total	887.40	562.28	720.38	1,816,606	1,816,606

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515437	0.060435	0.179988	0.139880	0.041945	0.006639	0.015487	0.028746	0.001918	0.002517	0.004333	0.000596	0.002079

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
NaturalGas Unmitigated	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

Land Use	kBTU/yr	lb/day										lb/day					
Health Club	2703.52	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Other Non-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
Recreational Swimming Pool	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
Total		**0.0292**	**0.2651**	**0.2226**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**318.0609**	**318.0609**	**6.1000e-003**	**5.8300e-003**	**319.9966**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	2.70352	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Other Non-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
Recreational Swimming Pool	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
Total		**0.0292**	**0.2651**	**0.2226**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**318.0609**	**318.0609**	**6.1000e-003**	**5.8300e-003**	**319.9966**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Unmitigated	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Mitigated	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**6.3835**	**7.0000e-005**	**7.1700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**6.3835**	**7.0000e-005**	**7.1700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Belmont Pool - Existing

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Recreational Swimming Pool	18.15	1000sqft	0.42	18,150.00	0
Health Club	45.60	1000sqft	1.05	45,600.00	0
Other Non-Asphalt Surfaces	4.14	Acre	4.14	180,338.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2015
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**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 - Existing scenario, no construction

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	20.87	8.82

tblVehicleTrips	ST_TR	20.87	8.82
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	WD_TR	32.93	13.92
tblVehicleTrips	WD_TR	32.93	13.92

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**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	1.1649	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Energy	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	287.3310	287.3310	6.5500e-003	2.1100e-003	288.1233
Mobile	0.5297	1.3306	5.3709	0.0101	0.6880	0.0177	0.7058	0.1841	0.0163	0.2004	0.0000	830.6509	830.6509	0.0372	0.0000	831.4315
Waste						0.0000	0.0000		0.0000	0.0000	73.7608	0.0000	73.7608	4.3591	0.0000	165.3028
Water						0.0000	0.0000		0.0000	0.0000	1.1962	41.6428	42.8390	0.1238	3.1000e-003	46.4020
Total	**1.6999**	**1.3790**	**5.4124**	**0.0104**	**0.6880**	**0.0214**	**0.7095**	**0.1841**	**0.0200**	**0.2041**	**74.9570**	**1,159.6264**	**1,234.5834**	**4.5267**	**5.2100e-003**	**1,331.2614**

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	1.1649	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Energy	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	287.3310	287.3310	6.5500e-003	2.1100e-003	288.1233
Mobile	0.5297	1.3306	5.3709	0.0101	0.6880	0.0177	0.7058	0.1841	0.0163	0.2004	0.0000	830.6509	830.6509	0.0372	0.0000	831.4315
Waste						0.0000	0.0000		0.0000	0.0000	73.7608	0.0000	73.7608	4.3591	0.0000	165.3028
Water						0.0000	0.0000		0.0000	0.0000	1.1962	41.6428	42.8390	0.1238	3.1000e-003	46.4001
Total	**1.6999**	**1.3790**	**5.4124**	**0.0104**	**0.6880**	**0.0214**	**0.7095**	**0.1841**	**0.0200**	**0.2041**	**74.9570**	**1,159.6264**	**1,234.5834**	**4.5267**	**5.2100e-003**	**1,331.2595**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	Site Preparation	Site Preparation	1/1/2015	12/31/2014	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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	0.5297	1.3306	5.3709	0.0101	0.6880	0.0177	0.7058	0.1841	0.0163	0.2004	0.0000	830.6509	830.6509	0.0372	0.0000	831.4315
Unmitigated	0.5297	1.3306	5.3709	0.0101	0.6880	0.0177	0.7058	0.1841	0.0163	0.2004	0.0000	830.6509	830.6509	0.0372	0.0000	831.4315

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	634.75	402.19	515.28	1,250,030	1,250,030
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	252.65	160.08	205.10	566,576	566,576
Total	887.40	562.28	720.38	1,816,606	1,816,606

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515437	0.060435	0.179988	0.139880	0.041945	0.006639	0.015487	0.028746	0.001918	0.002517	0.004333	0.000596	0.002079

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					
NaturalGas Mitigated	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6586	52.6586	1.0100e-003	9.7000e-004	52.9790
NaturalGas Unmitigated	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6586	52.6586	1.0100e-003	9.7000e-004	52.9790
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	234.6724	234.6724	5.5400e-003	1.1500e-003	235.1443

Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	234.6724	234.6724	5.5400e-003	1.1500e-003	235.1443

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					
Health Club	986784	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6586	52.6586	1.0100e-003	9.7000e-004	52.9790
Other Non-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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3200e-003**	**0.0484**	**0.0406**	**2.9000e-004**		**3.6800e-003**	**3.6800e-003**		**3.6800e-003**	**3.6800e-003**	**0.0000**	**52.6586**	**52.6586**	**1.0100e-003**	**9.7000e-004**	**52.9790**

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					
Health Club	986784	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6586	52.6586	1.0100e-003	9.7000e-004	52.9790
Other Non-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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3200e-003**	**0.0484**	**0.0406**	**2.9000e-004**		**3.6800e-003**	**3.6800e-003**		**3.6800e-003**	**3.6800e-003**	**0.0000**	**52.6586**	**52.6586**	**1.0100e-003**	**9.7000e-004**	**52.9790**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Health Club	421344	234.6724	5.5400e-003	1.1500e-003	235.1443
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**234.6724**	**5.5400e-003**	**1.1500e-003**	**235.1443**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Health Club	421344	234.6724	5.5400e-003	1.1500e-003	235.1443
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**234.6724**	**5.5400e-003**	**1.1500e-003**	**235.1443**

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	1.1649	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Unmitigated	1.1649	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-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	0.2828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8820					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Total	**1.1649**	**1.0000e-005**	**9.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6800e-003**	**1.6800e-003**	**0.0000**	**0.0000**	**1.7900e-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	0.2828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8820					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Total	**1.1649**	**1.0000e-005**	**9.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6800e-003**	**1.6800e-003**	**0.0000**	**0.0000**	**1.7900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	42.8390	0.1238	3.1000e-003	46.4020
Mitigated	42.8390	0.1238	3.1000e-003	46.4001

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Health Club	2.69693 / 1.65296	30.6425	0.0886	2.2200e-003	33.1911
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	1.07345 / 0.65792	12.1965	0.0353	8.8000e-004	13.2109

Total		**42.8390**	**0.1238**	**3.1000e-003**	**46.4020**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Health Club	2.69693 / 1.65296	30.6425	0.0886	2.2200e-003	33.1897
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	1.07345 / 0.65792	12.1965	0.0353	8.8000e-004	13.2104
Total		**42.8390**	**0.1238**	**3.1000e-003**	**46.4001**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	73.7608	4.3591	0.0000	165.3028
Unmitigated	73.7608	4.3591	0.0000	165.3028

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Health Club	259.92	52.7614	3.1181	0.0000	118.2417
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	103.45	20.9994	1.2410	0.0000	47.0610
Total		**73.7608**	**4.3591**	**0.0000**	**165.3028**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Health Club	259.92	52.7614	3.1181	0.0000	118.2417
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	103.45	20.9994	1.2410	0.0000	47.0610
Total		**73.7608**	**4.3591**	**0.0000**	**165.3028**

9.0 Operational Offroad

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

10.0 Vegetation

CalEEMod Calculations

Proposed Project Conditions

Belmont Pool

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.20	Acre	4.20	0.00	0
Health Club	90.50	1000sqft	2.08	90,500.00	0
Recreational Swimming Pool	35.00	1000sqft	0.80	35,000.00	0
Other Asphalt Surfaces	1.60	Acre	1.60	0.00	0
Fast Food Restaurant w/o Drive Thru	1.50	1000sqft	0.03	1,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From project description

Construction Phase - Construction to start in 2017 and last 18 months. Assume architectural coating applied during building construction phase.

Demolition -

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	80.00
tblConstructionPhase	NumDays	230.00	330.00
tblConstructionPhase	PhaseEndDate	10/5/2018	6/15/2018
tblConstructionPhase	PhaseStartDate	6/16/2018	2/24/2018
tblGrading	MaterialExported	0.00	1,500.00
tblLandUse	LandUseSquareFeet	182,952.00	0.00
tblLandUse	LandUseSquareFeet	69,696.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	716.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9056	51.8381	40.4537	0.0497	18.2675	2.7558	21.0233	9.9840	2.5354	12.5194	0.0000	4,965.5479	4,965.5479	1.2367	0.0000	4,991.5180
2018	40.1244	27.0645	24.6774	0.0434	0.8467	1.6753	2.5220	0.2271	1.5834	1.8105	0.0000	4,039.5810	4,039.5810	0.7068	0.0000	4,054.4242

Total	**45.0300**	**78.9026**	**65.1311**	**0.0931**	**19.1141**	**4.4312**	**23.5453**	**10.2112**	**4.1188**	**14.3300**	**0.0000**	**9,005.1290**	**9,005.1290**	**1.9435**	**0.0000**	**9,045.9422**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9056	51.8381	40.4537	0.0497	7.2470	2.7558	10.0029	3.9263	2.5354	6.4617	0.0000	4,965.5479	4,965.5479	1.2367	0.0000	4,991.5180
2018	40.1244	27.0645	24.6774	0.0434	0.8467	1.6753	2.5220	0.2271	1.5834	1.8105	0.0000	4,039.5810	4,039.5810	0.7068	0.0000	4,054.4242
Total	**45.0300**	**78.9026**	**65.1311**	**0.0931**	**8.0937**	**4.4312**	**12.5249**	**4.1534**	**4.1188**	**8.2722**	**0.0000**	**9,005.1290**	**9,005.1290**	**1.9435**	**0.0000**	**9,045.9422**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**57.66**	**0.00**	**46.81**	**59.32**	**0.00**	**42.27**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Energy	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
Mobile	6.8524	15.8223	65.9982	0.1799	11.8858	0.2433	12.1291	3.1759	0.2244	3.4002		14,391.1094	14,391.1094	0.5181		14,401.9893
Total	**10.2442**	**16.4546**	**66.5429**	**0.1837**	**11.8858**	**0.2914**	**12.1772**	**3.1759**	**0.2725**	**3.4483**		**15,149.7412**	**15,149.7412**	**0.5327**	**0.0139**	**15,165.2395**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Energy	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
Mobile	6.8524	15.8223	65.9982	0.1799	11.8858	0.2433	12.1291	3.1759	0.2244	3.4002		14,391.1094	14,391.1094	0.5181		14,401.9893
Total	**10.2442**	**16.4546**	**66.5429**	**0.1837**	**11.8858**	**0.2914**	**12.1772**	**3.1759**	**0.2725**	**3.4483**		**15,149.7412**	**15,149.7412**	**0.5327**	**0.0139**	**15,165.2395**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Grading	Grading	2/11/2017	3/10/2017	5	20	
4	Building Construction	Building Construction	3/11/2017	6/15/2018	5	330	
5	Architectural Coating	Architectural Coating	2/24/2018	6/15/2018	5	80	
6	Paving	Paving	6/16/2018	7/13/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 190,500; Non-Residential Outdoor: 63,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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

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	207.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Grading	6	15.00	0.00	188.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2441	0.0000	2.2441	0.3398	0.0000	0.3398			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**2.2441**	**2.1252**	**4.3693**	**0.3398**	**1.9797**	**2.3195**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1687	2.6288	1.9318	7.6300e-003	0.1803	0.0406	0.2209	0.0494	0.0373	0.0867		757.4719	757.4719	5.4100e-003		757.5855

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.2248**	**2.6993**	**2.8123**	**9.7500e-003**	**0.3480**	**0.0419**	**0.3899**	**0.0939**	**0.0386**	**0.1324**		**929.0806**	**929.0806**	**0.0139**		**929.3714**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8752	0.0000	0.8752	0.1325	0.0000	0.1325			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**0.8752**	**2.1252**	**3.0004**	**0.1325**	**1.9797**	**2.1122**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1687	2.6288	1.9318	7.6300e-003	0.1803	0.0406	0.2209	0.0494	0.0373	0.0867		757.4719	757.4719	5.4100e-003		757.5855
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.2248**	**2.6993**	**2.8123**	**9.7500e-003**	**0.3480**	**0.0419**	**0.3899**	**0.0939**	**0.0386**	**0.1324**		**929.0806**	**929.0806**	**0.0139**		**929.3714**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		205.9304	205.9304	0.0101		206.1431
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**205.9304**	**205.9304**	**0.0101**		**206.1431**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**7.0458**	**2.7542**	**9.8001**	**3.8730**	**2.5339**	**6.4069**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		205.9304	205.9304	0.0101		206.1431
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**205.9304**	**205.9304**	**0.0101**		**206.1431**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5608	0.0000	6.5608	3.3688	0.0000	3.3688			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507

Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5608**	**2.0388**	**8.5996**	**3.3688**	**1.8757**	**5.2445**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1532	2.3875	1.7544	6.9300e-003	0.1638	0.0368	0.2006	0.0449	0.0339	0.0787		687.9455	687.9455	4.9100e-003		688.0487
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.2093**	**2.4580**	**2.6350**	**9.0500e-003**	**0.3314**	**0.0382**	**0.3696**	**0.0893**	**0.0351**	**0.1244**		**859.5542**	**859.5542**	**0.0134**		**859.8346**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5587	0.0000	2.5587	1.3138	0.0000	1.3138			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**2.5587**	**2.0388**	**4.5975**	**1.3138**	**1.8757**	**3.1895**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1532	2.3875	1.7544	6.9300e-003	0.1638	0.0368	0.2006	0.0449	0.0339	0.0787		687.9455	687.9455	4.9100e-003		688.0487
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.2093**	**2.4580**	**2.6350**	**9.0500e-003**	**0.3314**	**0.0382**	**0.3696**	**0.0893**	**0.0351**	**0.1244**		**859.5542**	**859.5542**	**0.0134**		**859.8346**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1608	1.6606	1.9700	4.5700e-003	0.1313	0.0264	0.1577	0.0374	0.0243	0.0617		450.8010	450.8010	3.1800e-003		450.8678
Worker	0.1984	0.2492	3.1113	7.5000e-003	0.5924	4.7600e-003	0.5972	0.1571	4.4000e-003	0.1615		606.3505	606.3505	0.0298		606.9769
Total	**0.3592**	**1.9098**	**5.0813**	**0.0121**	**0.7237**	**0.0312**	**0.7549**	**0.1945**	**0.0287**	**0.2232**		**1,057.1515**	**1,057.1515**	**0.0330**		**1,057.8447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1608	1.6606	1.9700	4.5700e-003	0.1313	0.0264	0.1577	0.0374	0.0243	0.0617		450.8010	450.8010	3.1800e-003		450.8678
Worker	0.1984	0.2492	3.1113	7.5000e-003	0.5924	4.7600e-003	0.5972	0.1571	4.4000e-003	0.1615		606.3505	606.3505	0.0298		606.9769
Total	**0.3592**	**1.9098**	**5.0813**	**0.0121**	**0.7237**	**0.0312**	**0.7549**	**0.1945**	**0.0287**	**0.2232**		**1,057.1515**	**1,057.1515**	**0.0330**		**1,057.8447**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1508	1.5249	1.8769	4.5600e-003	0.1313	0.0249	0.1562	0.0374	0.0229	0.0603		443.2415	443.2415	3.1600e-003		443.3079
Worker	0.1788	0.2261	2.8269	7.5000e-003	0.5924	4.6400e-003	0.5971	0.1571	4.2900e-003	0.1614		583.7884	583.7884	0.0277		584.3698
Total	**0.3297**	**1.7510**	**4.7038**	**0.0121**	**0.7237**	**0.0296**	**0.7532**	**0.1945**	**0.0272**	**0.2217**		**1,027.0299**	**1,027.0299**	**0.0309**		**1,027.6777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1508	1.5249	1.8769	4.5600e-003	0.1313	0.0249	0.1562	0.0374	0.0229	0.0603		443.2415	443.2415	3.1600e-003		443.3079
Worker	0.1788	0.2261	2.8269	7.5000e-003	0.5924	4.6400e-003	0.5971	0.1571	4.2900e-003	0.1614		583.7884	583.7884	0.0277		584.3698
Total	**0.3297**	**1.7510**	**4.7038**	**0.0121**	**0.7237**	**0.0296**	**0.7532**	**0.1945**	**0.0272**	**0.2217**		**1,027.0299**	**1,027.0299**	**0.0309**		**1,027.6777**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.7903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**37.0889**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0371	0.0469	0.5867	1.5600e-003	0.1230	9.6000e-004	0.1239	0.0326	8.9000e-004	0.0335		121.1636	121.1636	5.7500e-003		121.2843
Total	**0.0371**	**0.0469**	**0.5867**	**1.5600e-003**	**0.1230**	**9.6000e-004**	**0.1239**	**0.0326**	**8.9000e-004**	**0.0335**		**121.1636**	**121.1636**	**5.7500e-003**		**121.2843**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.7903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**37.0889**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0371	0.0469	0.5867	1.5600e-003	0.1230	9.6000e-004	0.1239	0.0326	8.9000e-004	0.0335		121.1636	121.1636	5.7500e-003		121.2843
Total	**0.0371**	**0.0469**	**0.5867**	**1.5600e-003**	**0.1230**	**9.6000e-004**	**0.1239**	**0.0326**	**8.9000e-004**	**0.0335**		**121.1636**	**121.1636**	**5.7500e-003**		**121.2843**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8210**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0640	0.8001	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2231	165.2231	7.8400e-003		165.3877
Total	**0.0506**	**0.0640**	**0.8001**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2231**	**165.2231**	**7.8400e-003**		**165.3877**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8210**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0640	0.8001	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2231	165.2231	7.8400e-003		165.3877
Total	**0.0506**	**0.0640**	**0.8001**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2231**	**165.2231**	**7.8400e-003**		**165.3877**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.8524	15.8223	65.9982	0.1799	11.8858	0.2433	12.1291	3.1759	0.2244	3.4002		14,391.1094	14,391.1094	0.5181		14,401.9893
Unmitigated	6.8524	15.8223	65.9982	0.1799	11.8858	0.2433	12.1291	3.1759	0.2244	3.4002		14,391.1094	14,391.1094	0.5181		14,401.9893

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	1,819.05	1,152.97	1476.96	3,582,496	3,582,496
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	703.50	445.90	571.20	1,577,725	1,577,725
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,522.55	1,598.87	2,048.16	5,160,221	5,160,221

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Fast Food Restaurant w/o Drive Thru	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511108	0.059746	0.180859	0.139188	0.042462	0.006666	0.016153	0.032295	0.001940	0.002496	0.004377	0.000582	0.002128

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
NaturalGas Unmitigated	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	5365.53	0.0579	0.5260	0.4419	3.1600e-003		0.0400	0.0400		0.0400	0.0400		631.2393	631.2393	0.0121	0.0116	635.0809
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

Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	1082.59	0.0117	0.1061	0.0892	6.4000e-004		8.0700e-003	8.0700e-003		8.0700e-003	8.0700e-003		127.3634	127.3634	2.4400e-003	2.3300e-003	128.1385
Total		**0.0695**	**0.6322**	**0.5310**	**3.8000e-003**		**0.0481**	**0.0481**		**0.0481**	**0.0481**		**758.6027**	**758.6027**	**0.0145**	**0.0139**	**763.2195**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	1.08259	0.0117	0.1061	0.0892	6.4000e-004		8.0700e-003	8.0700e-003		8.0700e-003	8.0700e-003		127.3634	127.3634	2.4400e-003	2.3300e-003	128.1385
Health Club	5.36553	0.0579	0.5260	0.4419	3.1600e-003		0.0400	0.0400		0.0400	0.0400		631.2393	631.2393	0.0121	0.0116	635.0809
Total		**0.0695**	**0.6322**	**0.5310**	**3.8000e-003**		**0.0481**	**0.0481**		**0.0481**	**0.0481**		**758.6027**	**758.6027**	**0.0145**	**0.0139**	**763.2195**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Unmitigated	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Total	**3.3223**	**1.3000e-004**	**0.0137**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0291**	**0.0291**	**8.0000e-005**		**0.0307**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Total	**3.3223**	**1.3000e-004**	**0.0137**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0291**	**0.0291**	**8.0000e-005**		**0.0307**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Belmont Pool

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.20	Acre	4.20	0.00	0
Health Club	90.50	1000sqft	2.08	90,500.00	0
Recreational Swimming Pool	35.00	1000sqft	0.80	35,000.00	0
Other Asphalt Surfaces	1.60	Acre	1.60	0.00	0
Fast Food Restaurant w/o Drive Thru	1.50	1000sqft	0.03	1,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From project description

Construction Phase - Construction to start in 2017 and last 18 months. Assume architectural coating applied during building construction phase.

Demolition -

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	80.00
tblConstructionPhase	NumDays	230.00	330.00
tblConstructionPhase	PhaseEndDate	10/5/2018	6/15/2018
tblConstructionPhase	PhaseStartDate	6/16/2018	2/24/2018
tblGrading	MaterialExported	0.00	1,500.00
tblLandUse	LandUseSquareFeet	182,952.00	0.00
tblLandUse	LandUseSquareFeet	69,696.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	716.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9069	51.8464	40.3676	0.0495	18.2675	2.7558	21.0233	9.9840	2.5354	12.5194	0.0000	4,953.0658	4,953.0658	1.2367	0.0000	4,979.0359
2018	40.1416	27.1281	24.8004	0.0428	0.8467	1.6756	2.5222	0.2271	1.5837	1.8108	0.0000	3,991.8802	3,991.8802	0.7068	0.0000	4,006.7234

Total	**45.0485**	**78.9745**	**65.1681**	**0.0923**	**19.1141**	**4.4314**	**23.5455**	**10.2112**	**4.1190**	**14.3302**	**0.0000**	**8,944.9460**	**8,944.9460**	**1.9435**	**0.0000**	**8,985.7592**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9069	51.8464	40.3676	0.0495	7.2470	2.7558	10.0029	3.9263	2.5354	6.4617	0.0000	4,953.0658	4,953.0658	1.2367	0.0000	4,979.0359
2018	40.1416	27.1281	24.8004	0.0428	0.8467	1.6756	2.5222	0.2271	1.5837	1.8108	0.0000	3,991.8802	3,991.8802	0.7068	0.0000	4,006.7234
Total	**45.0485**	**78.9745**	**65.1681**	**0.0923**	**8.0937**	**4.4314**	**12.5251**	**4.1534**	**4.1190**	**8.2725**	**0.0000**	**8,944.9460**	**8,944.9460**	**1.9435**	**0.0000**	**8,985.7592**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**57.66**	**0.00**	**46.80**	**59.32**	**0.00**	**42.27**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Energy	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
Mobile	7.1085	16.5745	67.0089	0.1709	11.8858	0.2446	12.1304	3.1759	0.2255	3.4014		13,704.0922	13,704.0922	0.5188		13,714.9878
Total	**10.5003**	**17.2068**	**67.5536**	**0.1747**	**11.8858**	**0.2926**	**12.1785**	**3.1759**	**0.2736**	**3.4495**		**14,462.7240**	**14,462.7240**	**0.5335**	**0.0139**	**14,478.2380**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Energy	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
Mobile	7.1085	16.5745	67.0089	0.1709	11.8858	0.2446	12.1304	3.1759	0.2255	3.4014		13,704.0922	13,704.0922	0.5188		13,714.9878
Total	**10.5003**	**17.2068**	**67.5536**	**0.1747**	**11.8858**	**0.2926**	**12.1785**	**3.1759**	**0.2736**	**3.4495**		**14,462.7240**	**14,462.7240**	**0.5335**	**0.0139**	**14,478.2380**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Grading	Grading	2/11/2017	3/10/2017	5	20	
4	Building Construction	Building Construction	3/11/2017	6/15/2018	5	330	
5	Architectural Coating	Architectural Coating	2/24/2018	6/15/2018	5	80	
6	Paving	Paving	6/16/2018	7/13/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 190,500; Non-Residential Outdoor: 63,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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

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	207.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Grading	6	15.00	0.00	188.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2441	0.0000	2.2441	0.3398	0.0000	0.3398			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**2.2441**	**2.1252**	**4.3693**	**0.3398**	**1.9797**	**2.3195**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1774	2.7238	2.2275	7.6200e-003	0.1803	0.0407	0.2210	0.0494	0.0374	0.0868		755.6716	755.6716	5.4800e-003		755.7867

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.2347**	**2.8012**	**3.0363**	**9.6100e-003**	**0.3480**	**0.0420**	**0.3900**	**0.0939**	**0.0386**	**0.1325**		**916.5985**	**916.5985**	**0.0139**		**916.8909**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8752	0.0000	0.8752	0.1325	0.0000	0.1325			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**0.8752**	**2.1252**	**3.0004**	**0.1325**	**1.9797**	**2.1122**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1774	2.7238	2.2275	7.6200e-003	0.1803	0.0407	0.2210	0.0494	0.0374	0.0868		755.6716	755.6716	5.4800e-003		755.7867
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.2347**	**2.8012**	**3.0363**	**9.6100e-003**	**0.3480**	**0.0420**	**0.3900**	**0.0939**	**0.0386**	**0.1325**		**916.5985**	**916.5985**	**0.0139**		**916.8909**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1123	193.1123	0.0101		193.3250
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1123**	**193.1123**	**0.0101**		**193.3250**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**7.0458**	**2.7542**	**9.8001**	**3.8730**	**2.5339**	**6.4069**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1123	193.1123	0.0101		193.3250
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1123**	**193.1123**	**0.0101**		**193.3250**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5608	0.0000	6.5608	3.3688	0.0000	3.3688			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507

Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5608**	**2.0388**	**8.5996**	**3.3688**	**1.8757**	**5.2445**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1611	2.4738	2.0230	6.9200e-003	0.1638	0.0369	0.2007	0.0449	0.0340	0.0788		686.3104	686.3104	4.9800e-003		686.4150
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.2184**	**2.5512**	**2.8319**	**8.9100e-003**	**0.3314**	**0.0383**	**0.3697**	**0.0893**	**0.0352**	**0.1245**		**847.2373**	**847.2373**	**0.0134**		**847.5192**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5587	0.0000	2.5587	1.3138	0.0000	1.3138			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**2.5587**	**2.0388**	**4.5975**	**1.3138**	**1.8757**	**3.1895**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1611	2.4738	2.0230	6.9200e-003	0.1638	0.0369	0.2007	0.0449	0.0340	0.0788		686.3104	686.3104	4.9800e-003		686.4150
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.2184**	**2.5512**	**2.8319**	**8.9100e-003**	**0.3314**	**0.0383**	**0.3697**	**0.0893**	**0.0352**	**0.1245**		**847.2373**	**847.2373**	**0.0134**		**847.5192**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1756	1.7016	2.3868	4.5300e-003	0.1313	0.0267	0.1580	0.0374	0.0245	0.0619		447.0141	447.0141	3.2800e-003		447.0830
Worker	0.2023	0.2737	2.8579	7.0300e-003	0.5924	4.7600e-003	0.5972	0.1571	4.4000e-003	0.1615		568.6083	568.6083	0.0298		569.2347
Total	**0.3780**	**1.9752**	**5.2447**	**0.0116**	**0.7237**	**0.0315**	**0.7552**	**0.1945**	**0.0289**	**0.2235**		**1,015.6224**	**1,015.6224**	**0.0331**		**1,016.3177**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1756	1.7016	2.3868	4.5300e-003	0.1313	0.0267	0.1580	0.0374	0.0245	0.0619		447.0141	447.0141	3.2800e-003		447.0830
Worker	0.2023	0.2737	2.8579	7.0300e-003	0.5924	4.7600e-003	0.5972	0.1571	4.4000e-003	0.1615		568.6083	568.6083	0.0298		569.2347
Total	**0.3780**	**1.9752**	**5.2447**	**0.0116**	**0.7237**	**0.0315**	**0.7552**	**0.1945**	**0.0289**	**0.2235**		**1,015.6224**	**1,015.6224**	**0.0331**		**1,016.3177**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1642	1.5618	2.2904	4.5300e-003	0.1313	0.0251	0.1564	0.0374	0.0231	0.0605		439.5102	439.5102	3.2600e-003		439.5787
Worker	0.1820	0.2482	2.5864	7.0300e-003	0.5924	4.6400e-003	0.5971	0.1571	4.2900e-003	0.1614		547.3761	547.3761	0.0277		547.9575
Total	**0.3462**	**1.8100**	**4.8768**	**0.0116**	**0.7237**	**0.0298**	**0.7535**	**0.1945**	**0.0274**	**0.2219**		**986.8863**	**986.8863**	**0.0310**		**987.5362**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1642	1.5618	2.2904	4.5300e-003	0.1313	0.0251	0.1564	0.0374	0.0231	0.0605		439.5102	439.5102	3.2600e-003		439.5787
Worker	0.1820	0.2482	2.5864	7.0300e-003	0.5924	4.6400e-003	0.5971	0.1571	4.2900e-003	0.1614		547.3761	547.3761	0.0277		547.9575
Total	**0.3462**	**1.8100**	**4.8768**	**0.0116**	**0.7237**	**0.0298**	**0.7535**	**0.1945**	**0.0274**	**0.2219**		**986.8863**	**986.8863**	**0.0310**		**987.5362**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.7903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**37.0889**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0378	0.0515	0.5368	1.4600e-003	0.1230	9.6000e-004	0.1239	0.0326	8.9000e-004	0.0335		113.6064	113.6064	5.7500e-003		113.7270
Total	**0.0378**	**0.0515**	**0.5368**	**1.4600e-003**	**0.1230**	**9.6000e-004**	**0.1239**	**0.0326**	**8.9000e-004**	**0.0335**		**113.6064**	**113.6064**	**5.7500e-003**		**113.7270**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.7903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**37.0889**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0378	0.0515	0.5368	1.4600e-003	0.1230	9.6000e-004	0.1239	0.0326	8.9000e-004	0.0335		113.6064	113.6064	5.7500e-003		113.7270
Total	**0.0378**	**0.0515**	**0.5368**	**1.4600e-003**	**0.1230**	**9.6000e-004**	**0.1239**	**0.0326**	**8.9000e-004**	**0.0335**		**113.6064**	**113.6064**	**5.7500e-003**		**113.7270**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8210**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0702	0.7320	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9178	154.9178	7.8400e-003		155.0823
Total	**0.0515**	**0.0702**	**0.7320**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9178**	**154.9178**	**7.8400e-003**		**155.0823**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8210**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0702	0.7320	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9178	154.9178	7.8400e-003		155.0823
Total	**0.0515**	**0.0702**	**0.7320**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9178**	**154.9178**	**7.8400e-003**		**155.0823**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.1085	16.5745	67.0089	0.1709	11.8858	0.2446	12.1304	3.1759	0.2255	3.4014		13,704.0922	13,704.0922	0.5188		13,714.9878
Unmitigated	7.1085	16.5745	67.0089	0.1709	11.8858	0.2446	12.1304	3.1759	0.2255	3.4014		13,704.0922	13,704.0922	0.5188		13,714.9878

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	1,819.05	1,152.97	1476.96	3,582,496	3,582,496
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	703.50	445.90	571.20	1,577,725	1,577,725
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,522.55	1,598.87	2,048.16	5,160,221	5,160,221

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Fast Food Restaurant w/o Drive Thru	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511108	0.059746	0.180859	0.139188	0.042462	0.006666	0.016153	0.032295	0.001940	0.002496	0.004377	0.000582	0.002128

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
NaturalGas Unmitigated	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	5365.53	0.0579	0.5260	0.4419	3.1600e-003		0.0400	0.0400		0.0400	0.0400		631.2393	631.2393	0.0121	0.0116	635.0809
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

Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	1082.59	0.0117	0.1061	0.0892	6.4000e-004		8.0700e-003	8.0700e-003		8.0700e-003	8.0700e-003		127.3634	127.3634	2.4400e-003	2.3300e-003	128.1385
Total		**0.0695**	**0.6322**	**0.5310**	**3.8000e-003**		**0.0481**	**0.0481**		**0.0481**	**0.0481**		**758.6027**	**758.6027**	**0.0145**	**0.0139**	**763.2195**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	1.08259	0.0117	0.1061	0.0892	6.4000e-004		8.0700e-003	8.0700e-003		8.0700e-003	8.0700e-003		127.3634	127.3634	2.4400e-003	2.3300e-003	128.1385
Health Club	5.36553	0.0579	0.5260	0.4419	3.1600e-003		0.0400	0.0400		0.0400	0.0400		631.2393	631.2393	0.0121	0.0116	635.0809
Total		**0.0695**	**0.6322**	**0.5310**	**3.8000e-003**		**0.0481**	**0.0481**		**0.0481**	**0.0481**		**758.6027**	**758.6027**	**0.0145**	**0.0139**	**763.2195**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Unmitigated	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Total	**3.3223**	**1.3000e-004**	**0.0137**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0291**	**0.0291**	**8.0000e-005**		**0.0307**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Total	**3.3223**	**1.3000e-004**	**0.0137**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0291**	**0.0291**	**8.0000e-005**		**0.0307**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Belmont Pool

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.20	Acre	4.20	0.00	0
Health Club	90.50	1000sqft	2.08	90,500.00	0
Recreational Swimming Pool	35.00	1000sqft	0.80	35,000.00	0
Other Asphalt Surfaces	1.60	Acre	1.60	0.00	0
Fast Food Restaurant w/o Drive Thru	1.50	1000sqft	0.03	1,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From project description

Construction Phase - Construction to start in 2017 and last 18 months. Assume architectural coating applied during building construction phase.

Demolition -

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	80.00
tblConstructionPhase	NumDays	230.00	330.00
tblConstructionPhase	PhaseEndDate	10/5/2018	6/15/2018
tblConstructionPhase	PhaseStartDate	6/16/2018	2/24/2018
tblGrading	MaterialExported	0.00	1,500.00
tblLandUse	LandUseSquareFeet	182,952.00	0.00
tblLandUse	LandUseSquareFeet	69,696.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	716.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4677	4.0849	3.3076	5.1300e-003	0.2607	0.2465	0.5072	0.1089	0.2307	0.3396	0.0000	448.5909	448.5909	0.0894	0.0000	450.4682
2018	1.6836	1.7612	1.5931	2.7300e-003	0.0491	0.1069	0.1560	0.0132	0.1006	0.1138	0.0000	232.5576	232.5576	0.0440	0.0000	233.4824

Total	**2.1513**	**5.8461**	**4.9007**	**7.8600e-003**	**0.3098**	**0.3534**	**0.6632**	**0.1221**	**0.3313**	**0.4534**	**0.0000**	**681.1484**	**681.1484**	**0.1334**	**0.0000**	**683.9506**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4677	4.0849	3.3076	5.1300e-003	0.1519	0.2465	0.3984	0.0560	0.2307	0.2866	0.0000	448.5905	448.5905	0.0894	0.0000	450.4678
2018	1.6836	1.7612	1.5931	2.7300e-003	0.0491	0.1069	0.1560	0.0132	0.1006	0.1138	0.0000	232.5574	232.5574	0.0440	0.0000	233.4822
Total	**2.1513**	**5.8461**	**4.9007**	**7.8600e-003**	**0.2010**	**0.3534**	**0.5544**	**0.0692**	**0.3313**	**0.4005**	**0.0000**	**681.1478**	**681.1478**	**0.1334**	**0.0000**	**683.9500**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**35.12**	**0.00**	**16.41**	**43.34**	**0.00**	**11.67**	**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	0.6062	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Energy	0.0127	0.1154	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	381.7761	381.7761	0.0142	4.7400e-003	383.5430
Mobile	1.1252	2.8310	11.2769	0.0290	1.9557	0.0408	1.9966	0.5234	0.0376	0.5610	0.0000	2,106.5429	2,106.5429	0.0787	0.0000	2,108.1960
Waste						0.0000	0.0000		0.0000	0.0000	148.7173	0.0000	148.7173	8.7889	0.0000	333.2850

Water						0.0000	0.0000		0.0000	0.0000	2.4993	43.9099	46.4091	0.2587	6.4800e-003	53.8506
Total	**1.7441**	**2.9464**	**11.3755**	**0.0297**	**1.9557**	**0.0496**	**2.0053**	**0.5234**	**0.0464**	**0.5698**	**151.2165**	**2,532.2321**	**2,683.4486**	**9.1406**	**0.0112**	**2,878.8780**

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	0.6062	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Energy	0.0127	0.1154	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	381.7761	381.7761	0.0142	4.7400e-003	383.5430
Mobile	1.1252	2.8310	11.2769	0.0290	1.9557	0.0408	1.9966	0.5234	0.0376	0.5610	0.0000	2,106.5429	2,106.5429	0.0787	0.0000	2,108.1960
Waste						0.0000	0.0000		0.0000	0.0000	148.7173	0.0000	148.7173	8.7889	0.0000	333.2850
Water						0.0000	0.0000		0.0000	0.0000	2.4993	43.9099	46.4091	0.2587	6.4700e-003	53.8466
Total	**1.7441**	**2.9464**	**11.3755**	**0.0297**	**1.9557**	**0.0496**	**2.0053**	**0.5234**	**0.0464**	**0.5698**	**151.2165**	**2,532.2321**	**2,683.4486**	**9.1405**	**0.0112**	**2,878.8740**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.09**	**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	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	

3	Grading	Grading	2/11/2017	3/10/2017	5	20	
4	Building Construction	Building Construction	3/11/2017	6/15/2018	5	330	
5	Architectural Coating	Architectural Coating	2/24/2018	6/15/2018	5	80	
6	Paving	Paving	6/16/2018	7/13/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 190,500; Non-Residential Outdoor: 63,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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

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	207.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	188.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0224	0.0000	0.0224	3.4000e-003	0.0000	3.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8292
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**0.0224**	**0.0213**	**0.0437**	**3.4000e-003**	**0.0198**	**0.0232**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8292**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7500e-003	0.0277	0.0219	8.0000e-005	1.7700e-003	4.1000e-004	2.1800e-003	4.9000e-004	3.7000e-004	8.6000e-004	0.0000	6.8648	6.8648	5.0000e-005	0.0000	6.8659
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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**2.2900e-003**	**0.0285**	**0.0302**	**1.0000e-004**	**3.4200e-003**	**4.2000e-004**	**3.8400e-003**	**9.3000e-004**	**3.8000e-004**	**1.3100e-003**	**0.0000**	**8.3475**	**8.3475**	**1.3000e-004**	**0.0000**	**8.3501**

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					8.7500e-003	0.0000	8.7500e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8291
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**8.7500e-003**	**0.0213**	**0.0300**	**1.3300e-003**	**0.0198**	**0.0211**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	1.7500e-003	0.0277	0.0219	8.0000e-005	1.7700e-003	4.1000e-004	2.1800e-003	4.9000e-004	3.7000e-004	8.6000e-004	0.0000	6.8648	6.8648	5.0000e-005	0.0000	6.8659
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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**2.2900e-003**	**0.0285**	**0.0302**	**1.0000e-004**	**3.4200e-003**	**4.2000e-004**	**3.8400e-003**	**9.3000e-004**	**3.8000e-004**	**1.3100e-003**	**0.0000**	**8.3475**	**8.3475**	**1.3000e-004**	**0.0000**	**8.3501**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	**0.0242**	**0.2588**	**0.1970**	**2.0000e-004**	**0.0903**	**0.0138**	**0.1041**	**0.0497**	**0.0127**	**0.0623**	**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

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	3.2000e-004	4.8000e-004	4.9700e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8906
Total	**3.2000e-004**	**4.8000e-004**	**4.9700e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8906**

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					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	**0.0242**	**0.2588**	**0.1970**	**2.0000e-004**	**0.0352**	**0.0138**	**0.0490**	**0.0194**	**0.0127**	**0.0320**	**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

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	3.2000e-004	4.8000e-004	4.9700e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8906
Total	**3.2000e-004**	**4.8000e-004**	**4.9700e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8906**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0656	0.0000	0.0656	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0346	0.3598	0.2538	3.0000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	27.6117	27.6117	8.4600e-003	0.0000	27.7893
Total	**0.0346**	**0.3598**	**0.2538**	**3.0000e-004**	**0.0656**	**0.0204**	**0.0860**	**0.0337**	**0.0188**	**0.0525**	**0.0000**	**27.6117**	**27.6117**	**8.4600e-003**	**0.0000**	**27.7893**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5900e-003	0.0252	0.0199	7.0000e-005	1.6100e-003	3.7000e-004	1.9800e-003	4.4000e-004	3.4000e-004	7.8000e-004	0.0000	6.2347	6.2347	4.0000e-005	0.0000	6.2357
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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**2.1300e-003**	**0.0260**	**0.0281**	**9.0000e-005**	**3.2600e-003**	**3.8000e-004**	**3.6400e-003**	**8.8000e-004**	**3.5000e-004**	**1.2300e-003**	**0.0000**	**7.7174**	**7.7174**	**1.2000e-004**	**0.0000**	**7.7199**

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					0.0256	0.0000	0.0256	0.0131	0.0000	0.0131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0346	0.3598	0.2538	3.0000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	27.6117	27.6117	8.4600e-003	0.0000	27.7893
Total	**0.0346**	**0.3598**	**0.2538**	**3.0000e-004**	**0.0256**	**0.0204**	**0.0460**	**0.0131**	**0.0188**	**0.0319**	**0.0000**	**27.6117**	**27.6117**	**8.4600e-003**	**0.0000**	**27.7893**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5900e-003	0.0252	0.0199	7.0000e-005	1.6100e-003	3.7000e-004	1.9800e-003	4.4000e-004	3.4000e-004	7.8000e-004	0.0000	6.2347	6.2347	4.0000e-005	0.0000	6.2357
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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**2.1300e-003**	**0.0260**	**0.0281**	**9.0000e-005**	**3.2600e-003**	**3.8000e-004**	**3.6400e-003**	**8.8000e-004**	**3.5000e-004**	**1.2300e-003**	**0.0000**	**7.7174**	**7.7174**	**1.2000e-004**	**0.0000**	**7.7199**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3258	2.7726	1.9036	2.8100e-003		0.1870	0.1870		0.1757	0.1757	0.0000	251.4531	251.4531	0.0619	0.0000	252.7527
Total	**0.3258**	**2.7726**	**1.9036**	**2.8100e-003**		**0.1870**	**0.1870**		**0.1757**	**0.1757**	**0.0000**	**251.4531**	**251.4531**	**0.0619**	**0.0000**	**252.7527**

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	0.0179	0.1822	0.2435	4.8000e-004	0.0136	2.7900e-003	0.0164	3.8700e-003	2.5600e-003	6.4400e-003	0.0000	42.7893	42.7893	3.1000e-004	0.0000	42.7957
Worker	0.0200	0.0296	0.3076	7.5000e-004	0.0611	5.0000e-004	0.0616	0.0162	4.6000e-004	0.0167	0.0000	55.0065	55.0065	2.8400e-003	0.0000	55.0662
Total	**0.0379**	**0.2118**	**0.5511**	**1.2300e-003**	**0.0746**	**3.2900e-003**	**0.0779**	**0.0201**	**3.0200e-003**	**0.0231**	**0.0000**	**97.7958**	**97.7958**	**3.1500e-003**	**0.0000**	**97.8619**

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	0.3258	2.7726	1.9036	2.8100e-003		0.1870	0.1870		0.1757	0.1757	0.0000	251.4528	251.4528	0.0619	0.0000	252.7524
Total	**0.3258**	**2.7726**	**1.9036**	**2.8100e-003**		**0.1870**	**0.1870**		**0.1757**	**0.1757**	**0.0000**	**251.4528**	**251.4528**	**0.0619**	**0.0000**	**252.7524**

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	0.0179	0.1822	0.2435	4.8000e-004	0.0136	2.7900e-003	0.0164	3.8700e-003	2.5600e-003	6.4400e-003	0.0000	42.7893	42.7893	3.1000e-004	0.0000	42.7957
Worker	0.0200	0.0296	0.3076	7.5000e-004	0.0611	5.0000e-004	0.0616	0.0162	4.6000e-004	0.0167	0.0000	55.0065	55.0065	2.8400e-003	0.0000	55.0662
Total	**0.0379**	**0.2118**	**0.5511**	**1.2300e-003**	**0.0746**	**3.2900e-003**	**0.0779**	**0.0201**	**3.0200e-003**	**0.0231**	**0.0000**	**97.7958**	**97.7958**	**3.1500e-003**	**0.0000**	**97.8619**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1601	1.3957	1.0520	1.6100e-003		0.0897	0.0897		0.0843	0.0843	0.0000	142.0618	142.0618	0.0348	0.0000	142.7919
Total	**0.1601**	**1.3957**	**1.0520**	**1.6100e-003**		**0.0897**	**0.0897**		**0.0843**	**0.0843**	**0.0000**	**142.0618**	**142.0618**	**0.0348**	**0.0000**	**142.7919**

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	9.5900e-003	0.0956	0.1333	2.7000e-004	7.7600e-003	1.5000e-003	9.2600e-003	2.2100e-003	1.3800e-003	3.5900e-003	0.0000	24.0408	24.0408	1.7000e-004	0.0000	24.0445
Worker	0.0103	0.0153	0.1592	4.3000e-004	0.0349	2.8000e-004	0.0352	9.2700e-003	2.6000e-004	9.5200e-003	0.0000	30.2591	30.2591	1.5100e-003	0.0000	30.2907
Total	**0.0199**	**0.1109**	**0.2925**	**7.0000e-004**	**0.0427**	**1.7800e-003**	**0.0444**	**0.0115**	**1.6400e-003**	**0.0131**	**0.0000**	**54.2999**	**54.2999**	**1.6800e-003**	**0.0000**	**54.3352**

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	0.1601	1.3957	1.0520	1.6100e-003		0.0897	0.0897		0.0843	0.0843	0.0000	142.0616	142.0616	0.0348	0.0000	142.7917
Total	**0.1601**	**1.3957**	**1.0520**	**1.6100e-003**		**0.0897**	**0.0897**		**0.0843**	**0.0843**	**0.0000**	**142.0616**	**142.0616**	**0.0348**	**0.0000**	**142.7917**

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	9.5900e-003	0.0956	0.1333	2.7000e-004	7.7600e-003	1.5000e-003	9.2600e-003	2.2100e-003	1.3800e-003	3.5900e-003	0.0000	24.0408	24.0408	1.7000e-004	0.0000	24.0445
Worker	0.0103	0.0153	0.1592	4.3000e-004	0.0349	2.8000e-004	0.0352	9.2700e-003	2.6000e-004	9.5200e-003	0.0000	30.2591	30.2591	1.5100e-003	0.0000	30.2907
Total	**0.0199**	**0.1109**	**0.2925**	**7.0000e-004**	**0.0427**	**1.7800e-003**	**0.0444**	**0.0115**	**1.6400e-003**	**0.0131**	**0.0000**	**54.2999**	**54.2999**	**1.6800e-003**	**0.0000**	**54.3352**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4716					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0802	0.0742	1.2000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	10.2130	10.2130	9.7000e-004	0.0000	10.2334
Total	**1.4836**	**0.0802**	**0.0742**	**1.2000e-004**		**6.0200e-003**	**6.0200e-003**		**6.0200e-003**	**6.0200e-003**	**0.0000**	**10.2130**	**10.2130**	**9.7000e-004**	**0.0000**	**10.2334**

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	1.4200e-003	2.1200e-003	0.0220	6.0000e-005	4.8300e-003	4.0000e-005	4.8700e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	4.1868	4.1868	2.1000e-004	0.0000	4.1912
Total	**1.4200e-003**	**2.1200e-003**	**0.0220**	**6.0000e-005**	**4.8300e-003**	**4.0000e-005**	**4.8700e-003**	**1.2800e-003**	**4.0000e-005**	**1.3200e-003**	**0.0000**	**4.1868**	**4.1868**	**2.1000e-004**	**0.0000**	**4.1912**

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	1.4716					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0120	0.0802	0.0742	1.2000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	10.2130	10.2130	9.7000e-004	0.0000	10.2334
Total	**1.4836**	**0.0802**	**0.0742**	**1.2000e-004**		**6.0200e-003**	**6.0200e-003**		**6.0200e-003**	**6.0200e-003**	**0.0000**	**10.2130**	**10.2130**	**9.7000e-004**	**0.0000**	**10.2334**

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	1.4200e-003	2.1200e-003	0.0220	6.0000e-005	4.8300e-003	4.0000e-005	4.8700e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	4.1868	4.1868	2.1000e-004	0.0000	4.1912
Total	**1.4200e-003**	**2.1200e-003**	**0.0220**	**6.0000e-005**	**4.8300e-003**	**4.0000e-005**	**4.8700e-003**	**1.2800e-003**	**4.0000e-005**	**1.3200e-003**	**0.0000**	**4.1868**	**4.1868**	**2.1000e-004**	**0.0000**	**4.1912**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1716	0.1449	2.2000e-004		9.3900e-003	9.3900e-003		8.6400e-003	8.6400e-003	0.0000	20.3687	20.3687	6.3400e-003	0.0000	20.5019
Paving	2.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0182**	**0.1716**	**0.1449**	**2.2000e-004**		**9.3900e-003**	**9.3900e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**20.3687**	**20.3687**	**6.3400e-003**	**0.0000**	**20.5019**

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	4.8000e-004	7.2000e-004	7.5100e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4273	1.4273	7.0000e-005	0.0000	1.4288
Total	**4.8000e-004**	**7.2000e-004**	**7.5100e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4273**	**1.4273**	**7.0000e-005**	**0.0000**	**1.4288**

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	0.0161	0.1716	0.1449	2.2000e-004		9.3900e-003	9.3900e-003		8.6400e-003	8.6400e-003	0.0000	20.3687	20.3687	6.3400e-003	0.0000	20.5019
Paving	2.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0182**	**0.1716**	**0.1449**	**2.2000e-004**		**9.3900e-003**	**9.3900e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**20.3687**	**20.3687**	**6.3400e-003**	**0.0000**	**20.5019**

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	4.8000e-004	7.2000e-004	7.5100e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4273	1.4273	7.0000e-005	0.0000	1.4288
Total	**4.8000e-004**	**7.2000e-004**	**7.5100e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4273**	**1.4273**	**7.0000e-005**	**0.0000**	**1.4288**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1252	2.8310	11.2769	0.0290	1.9557	0.0408	1.9966	0.5234	0.0376	0.5610	0.0000	2,106.5429	2,106.5429	0.0787	0.0000	2,108.1960
Unmitigated	1.1252	2.8310	11.2769	0.0290	1.9557	0.0408	1.9966	0.5234	0.0376	0.5610	0.0000	2,106.5429	2,106.5429	0.0787	0.0000	2,108.1960

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	1,819.05	1,152.97	1476.96	3,582,496	3,582,496
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	703.50	445.90	571.20	1,577,725	1,577,725
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,522.55	1,598.87	2,048.16	5,160,221	5,160,221

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Fast Food Restaurant w/o Drive Th	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511108	0.059746	0.180859	0.139188	0.042462	0.006666	0.016153	0.032295	0.001940	0.002496	0.004377	0.000582	0.002128

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	256.1809	256.1809	0.0118	2.4400e-003	257.1835
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	256.1809	256.1809	0.0118	2.4400e-003	257.1835
NaturalGas Mitigated	0.0127	0.1154	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	125.5952	125.5952	2.4100e-003	2.3000e-003	126.3595
NaturalGas Unmitigated	0.0127	0.1154	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	125.5952	125.5952	2.4100e-003	2.3000e-003	126.3595

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					
Health Club	1.95842e+006	0.0106	0.0960	0.0806	5.8000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	104.5088	104.5088	2.0000e-003	1.9200e-003	105.1448
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
Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	395145	2.1300e-003	0.0194	0.0163	1.2000e-004		1.4700e-003	1.4700e-003		1.4700e-003	1.4700e-003	0.0000	21.0864	21.0864	4.0000e-004	3.9000e-004	21.2148
Total		**0.0127**	**0.1154**	**0.0969**	**7.0000e-004**		**8.7700e-003**	**8.7700e-003**		**8.7700e-003**	**8.7700e-003**	**0.0000**	**125.5952**	**125.5952**	**2.4000e-003**	**2.3100e-003**	**126.3595**

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					
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
Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	395145	2.1300e-003	0.0194	0.0163	1.2000e-004		1.4700e-003	1.4700e-003		1.4700e-003	1.4700e-003	0.0000	21.0864	21.0864	4.0000e-004	3.9000e-004	21.2148
Health Club	1.95842e+006	0.0106	0.0960	0.0806	5.8000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	104.5088	104.5088	2.0000e-003	1.9200e-003	105.1448
Total		**0.0127**	**0.1154**	**0.0969**	**7.0000e-004**		**8.7700e-003**	**8.7700e-003**		**8.7700e-003**	**8.7700e-003**	**0.0000**	**125.5952**	**125.5952**	**2.4000e-003**	**2.3100e-003**	**126.3595**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	58995	16.8824	7.8000e-004	1.6000e-004	16.9485
Health Club	836220	239.2985	0.0110	2.2800e-003	240.2350
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**256.1809**	**0.0118**	**2.4400e-003**	**257.1835**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	58995	16.8824	7.8000e-004	1.6000e-004	16.9485
Health Club	836220	239.2985	0.0110	2.2800e-003	240.2350
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**256.1809**	**0.0118**	**2.4400e-003**	**257.1835**

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	0.6062	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Unmitigated	0.6062	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-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	0.1472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4589					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Total	**0.6062**	**2.0000e-005**	**1.7100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.3000e-003**	**3.3000e-003**	**1.0000e-005**	**0.0000**	**3.4800e-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	0.1472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4589					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Total	**0.6062**	**2.0000e-005**	**1.7100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.3000e-003**	**3.3000e-003**	**1.0000e-005**	**0.0000**	**3.4800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.4091	0.2587	6.4700e-003	53.8466
Unmitigated	46.4091	0.2587	6.4800e-003	53.8506

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0.455301 / 0.0290617	1.9334	0.0149	3.7000e-004	2.3605

Health Club	5.35245 / 3.28054	32.0722	0.1758	4.4100e-003	37.1303
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	2.07001 / 1.26872	12.4036	0.0680	1.7000e-003	14.3598
Total		**46.4091**	**0.2587**	**6.4800e-003**	**53.8506**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0.455301 / 0.0290617	1.9334	0.0149	3.7000e-004	2.3603
Health Club	5.35245 / 3.28054	32.0722	0.1758	4.4000e-003	37.1276
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	2.07001 / 1.26872	12.4036	0.0680	1.7000e-003	14.3587
Total		**46.4091**	**0.2587**	**6.4700e-003**	**53.8466**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	148.7173	8.7889	0.0000	333.2850
Unmitigated	148.7173	8.7889	0.0000	333.2850

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	17.28	3.5077	0.2073	0.0000	7.8610
Health Club	515.85	104.7129	6.1884	0.0000	234.6683
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	199.5	40.4967	2.3933	0.0000	90.7557
Total		**148.7173**	**8.7889**	**0.0000**	**333.2850**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Fast Food Restaurant w/o Drive Thru	17.28	3.5077	0.2073	0.0000	7.8610
Health Club	515.85	104.7129	6.1884	0.0000	234.6683
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	199.5	40.4967	2.3933	0.0000	90.7557
Total		**148.7173**	**8.7889**	**0.0000**	**333.2850**

9.0 Operational Offroad

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

10.0 Vegetation

GREENHOUSE GAS EMISSIONS MODELING OUTPUTS

CalEEMod Calculations

Existing (No Build) Conditions

Belmont Pool - Existing

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Recreational Swimming Pool	18.15	1000sqft	0.42	18,150.00	0
Health Club	45.60	1000sqft	1.05	45,600.00	0
Other Non-Asphalt Surfaces	4.14	Acre	4.14	180,338.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2015
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**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 - Existing scenario, no construction

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	20.87	8.82

tblVehicleTrips	ST_TR	20.87	8.82
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	WD_TR	32.93	13.92
tblVehicleTrips	WD_TR	32.93	13.92

2.0 Emissions Summary

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**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	lb/day										lb/day					
Area	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Mobile	3.2085	7.4169	31.6578	0.0630	4.1818	0.1056	4.2874	1.1171	0.0970	1.2141		5,680.2122	5,680.2122	0.2447		5,685.3510
Total	**9.6211**	**7.6820**	**31.8876**	**0.0646**	**4.1818**	**0.1258**	**4.3075**	**1.1171**	**0.1172**	**1.2343**		**5,998.2880**	**5,998.2880**	**0.2508**	**5.8300e-003**	**6,005.3633**

Mitigated Operational

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

Category	lb/day											lb/day				
Area	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Mobile	3.2085	7.4169	31.6578	0.0630	4.1818	0.1056	4.2874	1.1171	0.0970	1.2141		5,680.2122	5,680.2122	0.2447		5,685.3510
Total	**9.6211**	**7.6820**	**31.8876**	**0.0646**	**4.1818**	**0.1258**	**4.3075**	**1.1171**	**0.1172**	**1.2343**		**5,998.2880**	**5,998.2880**	**0.2508**	**5.8300e-003**	**6,005.3633**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	Site Preparation	Site Preparation	1/1/2015	12/31/2014	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	3.2085	7.4169	31.6578	0.0630	4.1818	0.1056	4.2874	1.1171	0.0970	1.2141		5,680.2122	5,680.2122	0.2447		5,685.3510
Mitigated	3.2085	7.4169	31.6578	0.0630	4.1818	0.1056	4.2874	1.1171	0.0970	1.2141		5,680.2122	5,680.2122	0.2447		5,685.3510

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	634.75	402.19	515.28	1,250,030	1,250,030
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	252.65	160.08	205.10	566,576	566,576
Total	887.40	562.28	720.38	1,816,606	1,816,606

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515437	0.060435	0.179988	0.139880	0.041945	0.006639	0.015487	0.028746	0.001918	0.002517	0.004333	0.000596	0.002079

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
NaturalGas Unmitigated	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

Land Use	kBTU/yr	lb/day										lb/day					
Health Club	2703.52	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Other Non-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
Recreational Swimming Pool	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
Total		**0.0292**	**0.2651**	**0.2226**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**318.0609**	**318.0609**	**6.1000e-003**	**5.8300e-003**	**319.9966**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	2.70352	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Other Non-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
Recreational Swimming Pool	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
Total		**0.0292**	**0.2651**	**0.2226**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**318.0609**	**318.0609**	**6.1000e-003**	**5.8300e-003**	**319.9966**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Unmitigated	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Mitigated	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**6.3835**	**7.0000e-005**	**7.1700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**6.3835**	**7.0000e-005**	**7.1700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Belmont Pool - Existing

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Recreational Swimming Pool	18.15	1000sqft	0.42	18,150.00	0
Health Club	45.60	1000sqft	1.05	45,600.00	0
Other Non-Asphalt Surfaces	4.14	Acre	4.14	180,338.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2015
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**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 - Existing scenario, no construction

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	20.87	8.82

tblVehicleTrips	ST_TR	20.87	8.82
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	WD_TR	32.93	13.92
tblVehicleTrips	WD_TR	32.93	13.92

2.0 Emissions Summary

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**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	lb/day										lb/day					
Area	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Mobile	3.3507	7.7897	31.8552	0.0598	4.1818	0.1064	4.2882	1.1171	0.0978	1.2149		5,402.5671	5,402.5671	0.2449		5,407.7107
Total	**9.7633**	**8.0548**	**32.0850**	**0.0614**	**4.1818**	**0.1266**	**4.3084**	**1.1171**	**0.1179**	**1.2351**		**5,720.6429**	**5,720.6429**	**0.2511**	**5.8300e-003**	**5,727.7231**

Mitigated Operational

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

Category	lb/day										lb/day					
Area	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Energy	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Mobile	3.3507	7.7897	31.8552	0.0598	4.1818	0.1064	4.2882	1.1171	0.0978	1.2149		5,402.5671	5,402.5671	0.2449		5,407.7107
Total	**9.7633**	**8.0548**	**32.0850**	**0.0614**	**4.1818**	**0.1266**	**4.3084**	**1.1171**	**0.1179**	**1.2351**		**5,720.6429**	**5,720.6429**	**0.2511**	**5.8300e-003**	**5,727.7231**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	Site Preparation	Site Preparation	1/1/2015	12/31/2014	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	3.3507	7.7897	31.8552	0.0598	4.1818	0.1064	4.2882	1.1171	0.0978	1.2149		5,402.5671	5,402.5671	0.2449		5,407.7107
Mitigated	3.3507	7.7897	31.8552	0.0598	4.1818	0.1064	4.2882	1.1171	0.0978	1.2149		5,402.5671	5,402.5671	0.2449		5,407.7107

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	634.75	402.19	515.28	1,250,030	1,250,030
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	252.65	160.08	205.10	566,576	566,576
Total	887.40	562.28	720.38	1,816,606	1,816,606

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515437	0.060435	0.179988	0.139880	0.041945	0.006639	0.015487	0.028746	0.001918	0.002517	0.004333	0.000596	0.002079

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
NaturalGas Unmitigated	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

Land Use	kBTU/yr	lb/day										lb/day					
Health Club	2703.52	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Other Non-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
Recreational Swimming Pool	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
Total		**0.0292**	**0.2651**	**0.2226**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**318.0609**	**318.0609**	**6.1000e-003**	**5.8300e-003**	**319.9966**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	2.70352	0.0292	0.2651	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0609	318.0609	6.1000e-003	5.8300e-003	319.9966
Other Non-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
Recreational Swimming Pool	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
Total		**0.0292**	**0.2651**	**0.2226**	**1.5900e-003**		**0.0201**	**0.0201**		**0.0201**	**0.0201**		**318.0609**	**318.0609**	**6.1000e-003**	**5.8300e-003**	**319.9966**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Unmitigated	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Mitigated	6.3835	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**6.3835**	**7.0000e-005**	**7.1700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8330					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.1700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0149	0.0149	4.0000e-005		0.0158
Total	**6.3835**	**7.0000e-005**	**7.1700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0149**	**0.0149**	**4.0000e-005**		**0.0158**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Belmont Pool - Existing

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Recreational Swimming Pool	18.15	1000sqft	0.42	18,150.00	0
Health Club	45.60	1000sqft	1.05	45,600.00	0
Other Non-Asphalt Surfaces	4.14	Acre	4.14	180,338.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2015
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**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 - Existing scenario, no construction

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	20.87	8.82

tblVehicleTrips	ST_TR	20.87	8.82
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	SU_TR	26.73	11.30
tblVehicleTrips	WD_TR	32.93	13.92
tblVehicleTrips	WD_TR	32.93	13.92

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**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	1.1649	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Energy	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	287.3310	287.3310	6.5500e-003	2.1100e-003	288.1233
Mobile	0.5297	1.3306	5.3709	0.0101	0.6880	0.0177	0.7058	0.1841	0.0163	0.2004	0.0000	830.6509	830.6509	0.0372	0.0000	831.4315
Waste						0.0000	0.0000		0.0000	0.0000	73.7608	0.0000	73.7608	4.3591	0.0000	165.3028
Water						0.0000	0.0000		0.0000	0.0000	1.1962	41.6428	42.8390	0.1238	3.1000e-003	46.4020
Total	**1.6999**	**1.3790**	**5.4124**	**0.0104**	**0.6880**	**0.0214**	**0.7095**	**0.1841**	**0.0200**	**0.2041**	**74.9570**	**1,159.6264**	**1,234.5834**	**4.5267**	**5.2100e-003**	**1,331.2614**

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	1.1649	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Energy	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	287.3310	287.3310	6.5500e-003	2.1100e-003	288.1233
Mobile	0.5297	1.3306	5.3709	0.0101	0.6880	0.0177	0.7058	0.1841	0.0163	0.2004	0.0000	830.6509	830.6509	0.0372	0.0000	831.4315
Waste						0.0000	0.0000		0.0000	0.0000	73.7608	0.0000	73.7608	4.3591	0.0000	165.3028
Water						0.0000	0.0000		0.0000	0.0000	1.1962	41.6428	42.8390	0.1238	3.1000e-003	46.4001
Total	**1.6999**	**1.3790**	**5.4124**	**0.0104**	**0.6880**	**0.0214**	**0.7095**	**0.1841**	**0.0200**	**0.2041**	**74.9570**	**1,159.6264**	**1,234.5834**	**4.5267**	**5.2100e-003**	**1,331.2595**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	Site Preparation	Site Preparation	1/1/2015	12/31/2014	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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	0.5297	1.3306	5.3709	0.0101	0.6880	0.0177	0.7058	0.1841	0.0163	0.2004	0.0000	830.6509	830.6509	0.0372	0.0000	831.4315
Unmitigated	0.5297	1.3306	5.3709	0.0101	0.6880	0.0177	0.7058	0.1841	0.0163	0.2004	0.0000	830.6509	830.6509	0.0372	0.0000	831.4315

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	634.75	402.19	515.28	1,250,030	1,250,030
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	252.65	160.08	205.10	566,576	566,576
Total	887.40	562.28	720.38	1,816,606	1,816,606

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.515437	0.060435	0.179988	0.139880	0.041945	0.006639	0.015487	0.028746	0.001918	0.002517	0.004333	0.000596	0.002079

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					
NaturalGas Mitigated	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6586	52.6586	1.0100e-003	9.7000e-004	52.9790
NaturalGas Unmitigated	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6586	52.6586	1.0100e-003	9.7000e-004	52.9790
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	234.6724	234.6724	5.5400e-003	1.1500e-003	235.1443

Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	234.6724	234.6724	5.5400e-003	1.1500e-003	235.1443

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					
Health Club	986784	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6586	52.6586	1.0100e-003	9.7000e-004	52.9790
Other Non-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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3200e-003**	**0.0484**	**0.0406**	**2.9000e-004**		**3.6800e-003**	**3.6800e-003**		**3.6800e-003**	**3.6800e-003**	**0.0000**	**52.6586**	**52.6586**	**1.0100e-003**	**9.7000e-004**	**52.9790**

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					
Health Club	986784	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6586	52.6586	1.0100e-003	9.7000e-004	52.9790
Other Non-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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3200e-003**	**0.0484**	**0.0406**	**2.9000e-004**		**3.6800e-003**	**3.6800e-003**		**3.6800e-003**	**3.6800e-003**	**0.0000**	**52.6586**	**52.6586**	**1.0100e-003**	**9.7000e-004**	**52.9790**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Health Club	421344	234.6724	5.5400e-003	1.1500e-003	235.1443
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**234.6724**	**5.5400e-003**	**1.1500e-003**	**235.1443**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Health Club	421344	234.6724	5.5400e-003	1.1500e-003	235.1443
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**234.6724**	**5.5400e-003**	**1.1500e-003**	**235.1443**

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	1.1649	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Unmitigated	1.1649	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-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	0.2828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8820					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Total	**1.1649**	**1.0000e-005**	**9.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6800e-003**	**1.6800e-003**	**0.0000**	**0.0000**	**1.7900e-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	0.2828					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8820					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Total	**1.1649**	**1.0000e-005**	**9.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6800e-003**	**1.6800e-003**	**0.0000**	**0.0000**	**1.7900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	42.8390	0.1238	3.1000e-003	46.4020
Mitigated	42.8390	0.1238	3.1000e-003	46.4001

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Health Club	2.69693 / 1.65296	30.6425	0.0886	2.2200e-003	33.1911
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	1.07345 / 0.65792	12.1965	0.0353	8.8000e-004	13.2109

Total		**42.8390**	**0.1238**	**3.1000e-003**	**46.4020**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Health Club	2.69693 / 1.65296	30.6425	0.0886	2.2200e-003	33.1897
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	1.07345 / 0.65792	12.1965	0.0353	8.8000e-004	13.2104
Total		**42.8390**	**0.1238**	**3.1000e-003**	**46.4001**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	73.7608	4.3591	0.0000	165.3028
Unmitigated	73.7608	4.3591	0.0000	165.3028

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Health Club	259.92	52.7614	3.1181	0.0000	118.2417
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	103.45	20.9994	1.2410	0.0000	47.0610
Total		**73.7608**	**4.3591**	**0.0000**	**165.3028**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Health Club	259.92	52.7614	3.1181	0.0000	118.2417
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	103.45	20.9994	1.2410	0.0000	47.0610
Total		**73.7608**	**4.3591**	**0.0000**	**165.3028**

9.0 Operational Offroad

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

10.0 Vegetation

CalEEMod Calculations

Proposed Project Conditions

Belmont Pool

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.20	Acre	4.20	0.00	0
Health Club	90.50	1000sqft	2.08	90,500.00	0
Recreational Swimming Pool	35.00	1000sqft	0.80	35,000.00	0
Other Asphalt Surfaces	1.60	Acre	1.60	0.00	0
Fast Food Restaurant w/o Drive Thru	1.50	1000sqft	0.03	1,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From project description

Construction Phase - Construction to start in 2017 and last 18 months. Assume architectural coating applied during building construction phase.

Demolition -

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	80.00
tblConstructionPhase	NumDays	230.00	330.00
tblConstructionPhase	PhaseEndDate	10/5/2018	6/15/2018
tblConstructionPhase	PhaseStartDate	6/16/2018	2/24/2018
tblGrading	MaterialExported	0.00	1,500.00
tblLandUse	LandUseSquareFeet	182,952.00	0.00
tblLandUse	LandUseSquareFeet	69,696.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	716.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9056	51.8381	40.4537	0.0497	18.2675	2.7558	21.0233	9.9840	2.5354	12.5194	0.0000	4,965.5479	4,965.5479	1.2367	0.0000	4,991.5180
2018	40.1244	27.0645	24.6774	0.0434	0.8467	1.6753	2.5220	0.2271	1.5834	1.8105	0.0000	4,039.5810	4,039.5810	0.7068	0.0000	4,054.4242

Total	**45.0300**	**78.9026**	**65.1311**	**0.0931**	**19.1141**	**4.4312**	**23.5453**	**10.2112**	**4.1188**	**14.3300**	**0.0000**	**9,005.1290**	**9,005.1290**	**1.9435**	**0.0000**	**9,045.9422**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9056	51.8381	40.4537	0.0497	7.2470	2.7558	10.0029	3.9263	2.5354	6.4617	0.0000	4,965.5479	4,965.5479	1.2367	0.0000	4,991.5180
2018	40.1244	27.0645	24.6774	0.0434	0.8467	1.6753	2.5220	0.2271	1.5834	1.8105	0.0000	4,039.5810	4,039.5810	0.7068	0.0000	4,054.4242
Total	**45.0300**	**78.9026**	**65.1311**	**0.0931**	**8.0937**	**4.4312**	**12.5249**	**4.1534**	**4.1188**	**8.2722**	**0.0000**	**9,005.1290**	**9,005.1290**	**1.9435**	**0.0000**	**9,045.9422**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**57.66**	**0.00**	**46.81**	**59.32**	**0.00**	**42.27**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Energy	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
Mobile	6.8524	15.8223	65.9982	0.1799	11.8858	0.2433	12.1291	3.1759	0.2244	3.4002		14,391.1094	14,391.1094	0.5181		14,401.9893
Total	**10.2442**	**16.4546**	**66.5429**	**0.1837**	**11.8858**	**0.2914**	**12.1772**	**3.1759**	**0.2725**	**3.4483**		**15,149.7412**	**15,149.7412**	**0.5327**	**0.0139**	**15,165.2395**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Energy	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
Mobile	6.8524	15.8223	65.9982	0.1799	11.8858	0.2433	12.1291	3.1759	0.2244	3.4002		14,391.1094	14,391.1094	0.5181		14,401.9893
Total	**10.2442**	**16.4546**	**66.5429**	**0.1837**	**11.8858**	**0.2914**	**12.1772**	**3.1759**	**0.2725**	**3.4483**		**15,149.7412**	**15,149.7412**	**0.5327**	**0.0139**	**15,165.2395**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Grading	Grading	2/11/2017	3/10/2017	5	20	
4	Building Construction	Building Construction	3/11/2017	6/15/2018	5	330	
5	Architectural Coating	Architectural Coating	2/24/2018	6/15/2018	5	80	
6	Paving	Paving	6/16/2018	7/13/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 190,500; Non-Residential Outdoor: 63,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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

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	207.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Grading	6	15.00	0.00	188.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2441	0.0000	2.2441	0.3398	0.0000	0.3398			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**2.2441**	**2.1252**	**4.3693**	**0.3398**	**1.9797**	**2.3195**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1687	2.6288	1.9318	7.6300e-003	0.1803	0.0406	0.2209	0.0494	0.0373	0.0867		757.4719	757.4719	5.4100e-003		757.5855

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.2248**	**2.6993**	**2.8123**	**9.7500e-003**	**0.3480**	**0.0419**	**0.3899**	**0.0939**	**0.0386**	**0.1324**		**929.0806**	**929.0806**	**0.0139**		**929.3714**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8752	0.0000	0.8752	0.1325	0.0000	0.1325			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**0.8752**	**2.1252**	**3.0004**	**0.1325**	**1.9797**	**2.1122**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1687	2.6288	1.9318	7.6300e-003	0.1803	0.0406	0.2209	0.0494	0.0373	0.0867		757.4719	757.4719	5.4100e-003		757.5855
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.2248**	**2.6993**	**2.8123**	**9.7500e-003**	**0.3480**	**0.0419**	**0.3899**	**0.0939**	**0.0386**	**0.1324**		**929.0806**	**929.0806**	**0.0139**		**929.3714**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		205.9304	205.9304	0.0101		206.1431
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**205.9304**	**205.9304**	**0.0101**		**206.1431**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**7.0458**	**2.7542**	**9.8001**	**3.8730**	**2.5339**	**6.4069**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		205.9304	205.9304	0.0101		206.1431
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**205.9304**	**205.9304**	**0.0101**		**206.1431**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5608	0.0000	6.5608	3.3688	0.0000	3.3688			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507

Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5608**	**2.0388**	**8.5996**	**3.3688**	**1.8757**	**5.2445**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1532	2.3875	1.7544	6.9300e-003	0.1638	0.0368	0.2006	0.0449	0.0339	0.0787		687.9455	687.9455	4.9100e-003		688.0487
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.2093**	**2.4580**	**2.6350**	**9.0500e-003**	**0.3314**	**0.0382**	**0.3696**	**0.0893**	**0.0351**	**0.1244**		**859.5542**	**859.5542**	**0.0134**		**859.8346**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5587	0.0000	2.5587	1.3138	0.0000	1.3138			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**2.5587**	**2.0388**	**4.5975**	**1.3138**	**1.8757**	**3.1895**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1532	2.3875	1.7544	6.9300e-003	0.1638	0.0368	0.2006	0.0449	0.0339	0.0787		687.9455	687.9455	4.9100e-003		688.0487
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.2093**	**2.4580**	**2.6350**	**9.0500e-003**	**0.3314**	**0.0382**	**0.3696**	**0.0893**	**0.0351**	**0.1244**		**859.5542**	**859.5542**	**0.0134**		**859.8346**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1608	1.6606	1.9700	4.5700e-003	0.1313	0.0264	0.1577	0.0374	0.0243	0.0617		450.8010	450.8010	3.1800e-003		450.8678
Worker	0.1984	0.2492	3.1113	7.5000e-003	0.5924	4.7600e-003	0.5972	0.1571	4.4000e-003	0.1615		606.3505	606.3505	0.0298		606.9769
Total	**0.3592**	**1.9098**	**5.0813**	**0.0121**	**0.7237**	**0.0312**	**0.7549**	**0.1945**	**0.0287**	**0.2232**		**1,057.1515**	**1,057.1515**	**0.0330**		**1,057.8447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1608	1.6606	1.9700	4.5700e-003	0.1313	0.0264	0.1577	0.0374	0.0243	0.0617		450.8010	450.8010	3.1800e-003		450.8678
Worker	0.1984	0.2492	3.1113	7.5000e-003	0.5924	4.7600e-003	0.5972	0.1571	4.4000e-003	0.1615		606.3505	606.3505	0.0298		606.9769
Total	**0.3592**	**1.9098**	**5.0813**	**0.0121**	**0.7237**	**0.0312**	**0.7549**	**0.1945**	**0.0287**	**0.2232**		**1,057.1515**	**1,057.1515**	**0.0330**		**1,057.8447**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1508	1.5249	1.8769	4.5600e-003	0.1313	0.0249	0.1562	0.0374	0.0229	0.0603		443.2415	443.2415	3.1600e-003		443.3079
Worker	0.1788	0.2261	2.8269	7.5000e-003	0.5924	4.6400e-003	0.5971	0.1571	4.2900e-003	0.1614		583.7884	583.7884	0.0277		584.3698
Total	**0.3297**	**1.7510**	**4.7038**	**0.0121**	**0.7237**	**0.0296**	**0.7532**	**0.1945**	**0.0272**	**0.2217**		**1,027.0299**	**1,027.0299**	**0.0309**		**1,027.6777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1508	1.5249	1.8769	4.5600e-003	0.1313	0.0249	0.1562	0.0374	0.0229	0.0603		443.2415	443.2415	3.1600e-003		443.3079
Worker	0.1788	0.2261	2.8269	7.5000e-003	0.5924	4.6400e-003	0.5971	0.1571	4.2900e-003	0.1614		583.7884	583.7884	0.0277		584.3698
Total	**0.3297**	**1.7510**	**4.7038**	**0.0121**	**0.7237**	**0.0296**	**0.7532**	**0.1945**	**0.0272**	**0.2217**		**1,027.0299**	**1,027.0299**	**0.0309**		**1,027.6777**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.7903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**37.0889**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0371	0.0469	0.5867	1.5600e-003	0.1230	9.6000e-004	0.1239	0.0326	8.9000e-004	0.0335		121.1636	121.1636	5.7500e-003		121.2843
Total	**0.0371**	**0.0469**	**0.5867**	**1.5600e-003**	**0.1230**	**9.6000e-004**	**0.1239**	**0.0326**	**8.9000e-004**	**0.0335**		**121.1636**	**121.1636**	**5.7500e-003**		**121.2843**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.7903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**37.0889**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0371	0.0469	0.5867	1.5600e-003	0.1230	9.6000e-004	0.1239	0.0326	8.9000e-004	0.0335		121.1636	121.1636	5.7500e-003		121.2843
Total	**0.0371**	**0.0469**	**0.5867**	**1.5600e-003**	**0.1230**	**9.6000e-004**	**0.1239**	**0.0326**	**8.9000e-004**	**0.0335**		**121.1636**	**121.1636**	**5.7500e-003**		**121.2843**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8210**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0640	0.8001	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2231	165.2231	7.8400e-003		165.3877
Total	**0.0506**	**0.0640**	**0.8001**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2231**	**165.2231**	**7.8400e-003**		**165.3877**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8210**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0640	0.8001	2.1200e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		165.2231	165.2231	7.8400e-003		165.3877
Total	**0.0506**	**0.0640**	**0.8001**	**2.1200e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**165.2231**	**165.2231**	**7.8400e-003**		**165.3877**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.8524	15.8223	65.9982	0.1799	11.8858	0.2433	12.1291	3.1759	0.2244	3.4002		14,391.1094	14,391.1094	0.5181		14,401.9893
Unmitigated	6.8524	15.8223	65.9982	0.1799	11.8858	0.2433	12.1291	3.1759	0.2244	3.4002		14,391.1094	14,391.1094	0.5181		14,401.9893

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	1,819.05	1,152.97	1476.96	3,582,496	3,582,496
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	703.50	445.90	571.20	1,577,725	1,577,725
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,522.55	1,598.87	2,048.16	5,160,221	5,160,221

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Fast Food Restaurant w/o Drive Thru	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511108	0.059746	0.180859	0.139188	0.042462	0.006666	0.016153	0.032295	0.001940	0.002496	0.004377	0.000582	0.002128

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
NaturalGas Unmitigated	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	5365.53	0.0579	0.5260	0.4419	3.1600e-003		0.0400	0.0400		0.0400	0.0400		631.2393	631.2393	0.0121	0.0116	635.0809
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

Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	1082.59	0.0117	0.1061	0.0892	6.4000e-004		8.0700e-003	8.0700e-003		8.0700e-003	8.0700e-003		127.3634	127.3634	2.4400e-003	2.3300e-003	128.1385
Total		**0.0695**	**0.6322**	**0.5310**	**3.8000e-003**		**0.0481**	**0.0481**		**0.0481**	**0.0481**		**758.6027**	**758.6027**	**0.0145**	**0.0139**	**763.2195**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	1.08259	0.0117	0.1061	0.0892	6.4000e-004		8.0700e-003	8.0700e-003		8.0700e-003	8.0700e-003		127.3634	127.3634	2.4400e-003	2.3300e-003	128.1385
Health Club	5.36553	0.0579	0.5260	0.4419	3.1600e-003		0.0400	0.0400		0.0400	0.0400		631.2393	631.2393	0.0121	0.0116	635.0809
Total		**0.0695**	**0.6322**	**0.5310**	**3.8000e-003**		**0.0481**	**0.0481**		**0.0481**	**0.0481**		**758.6027**	**758.6027**	**0.0145**	**0.0139**	**763.2195**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Unmitigated	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Total	**3.3223**	**1.3000e-004**	**0.0137**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0291**	**0.0291**	**8.0000e-005**		**0.0307**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Total	**3.3223**	**1.3000e-004**	**0.0137**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0291**	**0.0291**	**8.0000e-005**		**0.0307**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Belmont Pool

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.20	Acre	4.20	0.00	0
Health Club	90.50	1000sqft	2.08	90,500.00	0
Recreational Swimming Pool	35.00	1000sqft	0.80	35,000.00	0
Other Asphalt Surfaces	1.60	Acre	1.60	0.00	0
Fast Food Restaurant w/o Drive Thru	1.50	1000sqft	0.03	1,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From project description

Construction Phase - Construction to start in 2017 and last 18 months. Assume architectural coating applied during building construction phase.

Demolition -

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	80.00
tblConstructionPhase	NumDays	230.00	330.00
tblConstructionPhase	PhaseEndDate	10/5/2018	6/15/2018
tblConstructionPhase	PhaseStartDate	6/16/2018	2/24/2018
tblGrading	MaterialExported	0.00	1,500.00
tblLandUse	LandUseSquareFeet	182,952.00	0.00
tblLandUse	LandUseSquareFeet	69,696.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	716.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9069	51.8464	40.3676	0.0495	18.2675	2.7558	21.0233	9.9840	2.5354	12.5194	0.0000	4,953.0658	4,953.0658	1.2367	0.0000	4,979.0359
2018	40.1416	27.1281	24.8004	0.0428	0.8467	1.6756	2.5222	0.2271	1.5837	1.8108	0.0000	3,991.8802	3,991.8802	0.7068	0.0000	4,006.7234

Total	**45.0485**	**78.9745**	**65.1681**	**0.0923**	**19.1141**	**4.4314**	**23.5455**	**10.2112**	**4.1190**	**14.3302**	**0.0000**	**8,944.9460**	**8,944.9460**	**1.9435**	**0.0000**	**8,985.7592**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9069	51.8464	40.3676	0.0495	7.2470	2.7558	10.0029	3.9263	2.5354	6.4617	0.0000	4,953.0658	4,953.0658	1.2367	0.0000	4,979.0359
2018	40.1416	27.1281	24.8004	0.0428	0.8467	1.6756	2.5222	0.2271	1.5837	1.8108	0.0000	3,991.8802	3,991.8802	0.7068	0.0000	4,006.7234
Total	**45.0485**	**78.9745**	**65.1681**	**0.0923**	**8.0937**	**4.4314**	**12.5251**	**4.1534**	**4.1190**	**8.2725**	**0.0000**	**8,944.9460**	**8,944.9460**	**1.9435**	**0.0000**	**8,985.7592**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**57.66**	**0.00**	**46.80**	**59.32**	**0.00**	**42.27**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Energy	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
Mobile	7.1085	16.5745	67.0089	0.1709	11.8858	0.2446	12.1304	3.1759	0.2255	3.4014		13,704.0922	13,704.0922	0.5188		13,714.9878
Total	**10.5003**	**17.2068**	**67.5536**	**0.1747**	**11.8858**	**0.2926**	**12.1785**	**3.1759**	**0.2736**	**3.4495**		**14,462.7240**	**14,462.7240**	**0.5335**	**0.0139**	**14,478.2380**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Energy	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
Mobile	7.1085	16.5745	67.0089	0.1709	11.8858	0.2446	12.1304	3.1759	0.2255	3.4014		13,704.0922	13,704.0922	0.5188		13,714.9878
Total	**10.5003**	**17.2068**	**67.5536**	**0.1747**	**11.8858**	**0.2926**	**12.1785**	**3.1759**	**0.2736**	**3.4495**		**14,462.7240**	**14,462.7240**	**0.5335**	**0.0139**	**14,478.2380**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**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	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Grading	Grading	2/11/2017	3/10/2017	5	20	
4	Building Construction	Building Construction	3/11/2017	6/15/2018	5	330	
5	Architectural Coating	Architectural Coating	2/24/2018	6/15/2018	5	80	
6	Paving	Paving	6/16/2018	7/13/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 190,500; Non-Residential Outdoor: 63,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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

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	207.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Grading	6	15.00	0.00	188.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2441	0.0000	2.2441	0.3398	0.0000	0.3398			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**2.2441**	**2.1252**	**4.3693**	**0.3398**	**1.9797**	**2.3195**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1774	2.7238	2.2275	7.6200e-003	0.1803	0.0407	0.2210	0.0494	0.0374	0.0868		755.6716	755.6716	5.4800e-003		755.7867

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.2347**	**2.8012**	**3.0363**	**9.6100e-003**	**0.3480**	**0.0420**	**0.3900**	**0.0939**	**0.0386**	**0.1325**		**916.5985**	**916.5985**	**0.0139**		**916.8909**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8752	0.0000	0.8752	0.1325	0.0000	0.1325			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**0.8752**	**2.1252**	**3.0004**	**0.1325**	**1.9797**	**2.1122**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1774	2.7238	2.2275	7.6200e-003	0.1803	0.0407	0.2210	0.0494	0.0374	0.0868		755.6716	755.6716	5.4800e-003		755.7867
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.2347**	**2.8012**	**3.0363**	**9.6100e-003**	**0.3480**	**0.0420**	**0.3900**	**0.0939**	**0.0386**	**0.1325**		**916.5985**	**916.5985**	**0.0139**		**916.8909**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1123	193.1123	0.0101		193.3250
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1123**	**193.1123**	**0.0101**		**193.3250**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**7.0458**	**2.7542**	**9.8001**	**3.8730**	**2.5339**	**6.4069**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1123	193.1123	0.0101		193.3250
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1123**	**193.1123**	**0.0101**		**193.3250**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5608	0.0000	6.5608	3.3688	0.0000	3.3688			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507

Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5608**	**2.0388**	**8.5996**	**3.3688**	**1.8757**	**5.2445**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1611	2.4738	2.0230	6.9200e-003	0.1638	0.0369	0.2007	0.0449	0.0340	0.0788		686.3104	686.3104	4.9800e-003		686.4150
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.2184**	**2.5512**	**2.8319**	**8.9100e-003**	**0.3314**	**0.0383**	**0.3697**	**0.0893**	**0.0352**	**0.1245**		**847.2373**	**847.2373**	**0.0134**		**847.5192**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5587	0.0000	2.5587	1.3138	0.0000	1.3138			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**2.5587**	**2.0388**	**4.5975**	**1.3138**	**1.8757**	**3.1895**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1611	2.4738	2.0230	6.9200e-003	0.1638	0.0369	0.2007	0.0449	0.0340	0.0788		686.3104	686.3104	4.9800e-003		686.4150
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.2184**	**2.5512**	**2.8319**	**8.9100e-003**	**0.3314**	**0.0383**	**0.3697**	**0.0893**	**0.0352**	**0.1245**		**847.2373**	**847.2373**	**0.0134**		**847.5192**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1756	1.7016	2.3868	4.5300e-003	0.1313	0.0267	0.1580	0.0374	0.0245	0.0619		447.0141	447.0141	3.2800e-003		447.0830
Worker	0.2023	0.2737	2.8579	7.0300e-003	0.5924	4.7600e-003	0.5972	0.1571	4.4000e-003	0.1615		568.6083	568.6083	0.0298		569.2347
Total	**0.3780**	**1.9752**	**5.2447**	**0.0116**	**0.7237**	**0.0315**	**0.7552**	**0.1945**	**0.0289**	**0.2235**		**1,015.6224**	**1,015.6224**	**0.0331**		**1,016.3177**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1756	1.7016	2.3868	4.5300e-003	0.1313	0.0267	0.1580	0.0374	0.0245	0.0619		447.0141	447.0141	3.2800e-003		447.0830
Worker	0.2023	0.2737	2.8579	7.0300e-003	0.5924	4.7600e-003	0.5972	0.1571	4.4000e-003	0.1615		568.6083	568.6083	0.0298		569.2347
Total	**0.3780**	**1.9752**	**5.2447**	**0.0116**	**0.7237**	**0.0315**	**0.7552**	**0.1945**	**0.0289**	**0.2235**		**1,015.6224**	**1,015.6224**	**0.0331**		**1,016.3177**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1642	1.5618	2.2904	4.5300e-003	0.1313	0.0251	0.1564	0.0374	0.0231	0.0605		439.5102	439.5102	3.2600e-003		439.5787
Worker	0.1820	0.2482	2.5864	7.0300e-003	0.5924	4.6400e-003	0.5971	0.1571	4.2900e-003	0.1614		547.3761	547.3761	0.0277		547.9575
Total	**0.3462**	**1.8100**	**4.8768**	**0.0116**	**0.7237**	**0.0298**	**0.7535**	**0.1945**	**0.0274**	**0.2219**		**986.8863**	**986.8863**	**0.0310**		**987.5362**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1642	1.5618	2.2904	4.5300e-003	0.1313	0.0251	0.1564	0.0374	0.0231	0.0605		439.5102	439.5102	3.2600e-003		439.5787
Worker	0.1820	0.2482	2.5864	7.0300e-003	0.5924	4.6400e-003	0.5971	0.1571	4.2900e-003	0.1614		547.3761	547.3761	0.0277		547.9575
Total	**0.3462**	**1.8100**	**4.8768**	**0.0116**	**0.7237**	**0.0298**	**0.7535**	**0.1945**	**0.0274**	**0.2219**		**986.8863**	**986.8863**	**0.0310**		**987.5362**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.7903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**37.0889**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0378	0.0515	0.5368	1.4600e-003	0.1230	9.6000e-004	0.1239	0.0326	8.9000e-004	0.0335		113.6064	113.6064	5.7500e-003		113.7270
Total	**0.0378**	**0.0515**	**0.5368**	**1.4600e-003**	**0.1230**	**9.6000e-004**	**0.1239**	**0.0326**	**8.9000e-004**	**0.0335**		**113.6064**	**113.6064**	**5.7500e-003**		**113.7270**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.7903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**37.0889**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0378	0.0515	0.5368	1.4600e-003	0.1230	9.6000e-004	0.1239	0.0326	8.9000e-004	0.0335		113.6064	113.6064	5.7500e-003		113.7270
Total	**0.0378**	**0.0515**	**0.5368**	**1.4600e-003**	**0.1230**	**9.6000e-004**	**0.1239**	**0.0326**	**8.9000e-004**	**0.0335**		**113.6064**	**113.6064**	**5.7500e-003**		**113.7270**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8210**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0702	0.7320	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9178	154.9178	7.8400e-003		155.0823
Total	**0.0515**	**0.0702**	**0.7320**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9178**	**154.9178**	**7.8400e-003**		**155.0823**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8210**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0702	0.7320	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9178	154.9178	7.8400e-003		155.0823
Total	**0.0515**	**0.0702**	**0.7320**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9178**	**154.9178**	**7.8400e-003**		**155.0823**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.1085	16.5745	67.0089	0.1709	11.8858	0.2446	12.1304	3.1759	0.2255	3.4014		13,704.0922	13,704.0922	0.5188		13,714.9878
Unmitigated	7.1085	16.5745	67.0089	0.1709	11.8858	0.2446	12.1304	3.1759	0.2255	3.4014		13,704.0922	13,704.0922	0.5188		13,714.9878

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	1,819.05	1,152.97	1476.96	3,582,496	3,582,496
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	703.50	445.90	571.20	1,577,725	1,577,725
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,522.55	1,598.87	2,048.16	5,160,221	5,160,221

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Fast Food Restaurant w/o Drive Thru	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511108	0.059746	0.180859	0.139188	0.042462	0.006666	0.016153	0.032295	0.001940	0.002496	0.004377	0.000582	0.002128

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195
NaturalGas Unmitigated	0.0695	0.6322	0.5310	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.6027	758.6027	0.0145	0.0139	763.2195

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	5365.53	0.0579	0.5260	0.4419	3.1600e-003		0.0400	0.0400		0.0400	0.0400		631.2393	631.2393	0.0121	0.0116	635.0809
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

Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	1082.59	0.0117	0.1061	0.0892	6.4000e-004		8.0700e-003	8.0700e-003		8.0700e-003	8.0700e-003		127.3634	127.3634	2.4400e-003	2.3300e-003	128.1385
Total		**0.0695**	**0.6322**	**0.5310**	**3.8000e-003**		**0.0481**	**0.0481**		**0.0481**	**0.0481**		**758.6027**	**758.6027**	**0.0145**	**0.0139**	**763.2195**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	1.08259	0.0117	0.1061	0.0892	6.4000e-004		8.0700e-003	8.0700e-003		8.0700e-003	8.0700e-003		127.3634	127.3634	2.4400e-003	2.3300e-003	128.1385
Health Club	5.36553	0.0579	0.5260	0.4419	3.1600e-003		0.0400	0.0400		0.0400	0.0400		631.2393	631.2393	0.0121	0.0116	635.0809
Total		**0.0695**	**0.6322**	**0.5310**	**3.8000e-003**		**0.0481**	**0.0481**		**0.0481**	**0.0481**		**758.6027**	**758.6027**	**0.0145**	**0.0139**	**763.2195**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Unmitigated	3.3223	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Total	**3.3223**	**1.3000e-004**	**0.0137**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0291**	**0.0291**	**8.0000e-005**		**0.0307**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8064					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0137	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0291	0.0291	8.0000e-005		0.0307
Total	**3.3223**	**1.3000e-004**	**0.0137**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0291**	**0.0291**	**8.0000e-005**		**0.0307**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Belmont Pool

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.20	Acre	4.20	0.00	0
Health Club	90.50	1000sqft	2.08	90,500.00	0
Recreational Swimming Pool	35.00	1000sqft	0.80	35,000.00	0
Other Asphalt Surfaces	1.60	Acre	1.60	0.00	0
Fast Food Restaurant w/o Drive Thru	1.50	1000sqft	0.03	1,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From project description

Construction Phase - Construction to start in 2017 and last 18 months. Assume architectural coating applied during building construction phase.

Demolition -

Vehicle Trips - Trip rates from traffic study

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403.

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	80.00
tblConstructionPhase	NumDays	230.00	330.00
tblConstructionPhase	PhaseEndDate	10/5/2018	6/15/2018
tblConstructionPhase	PhaseStartDate	6/16/2018	2/24/2018
tblGrading	MaterialExported	0.00	1,500.00
tblLandUse	LandUseSquareFeet	182,952.00	0.00
tblLandUse	LandUseSquareFeet	69,696.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	20.87	12.74
tblVehicleTrips	ST_TR	696.00	0.00
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	26.73	16.32
tblVehicleTrips	SU_TR	500.00	0.00
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	32.93	20.10
tblVehicleTrips	WD_TR	716.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4677	4.0849	3.3076	5.1300e-003	0.2607	0.2465	0.5072	0.1089	0.2307	0.3396	0.0000	448.5909	448.5909	0.0894	0.0000	450.4682
2018	1.6836	1.7612	1.5931	2.7300e-003	0.0491	0.1069	0.1560	0.0132	0.1006	0.1138	0.0000	232.5576	232.5576	0.0440	0.0000	233.4824

Total	**2.1513**	**5.8461**	**4.9007**	**7.8600e-003**	**0.3098**	**0.3534**	**0.6632**	**0.1221**	**0.3313**	**0.4534**	**0.0000**	**681.1484**	**681.1484**	**0.1334**	**0.0000**	**683.9506**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4677	4.0849	3.3076	5.1300e-003	0.1519	0.2465	0.3984	0.0560	0.2307	0.2866	0.0000	448.5905	448.5905	0.0894	0.0000	450.4678
2018	1.6836	1.7612	1.5931	2.7300e-003	0.0491	0.1069	0.1560	0.0132	0.1006	0.1138	0.0000	232.5574	232.5574	0.0440	0.0000	233.4822
Total	**2.1513**	**5.8461**	**4.9007**	**7.8600e-003**	**0.2010**	**0.3534**	**0.5544**	**0.0692**	**0.3313**	**0.4005**	**0.0000**	**681.1478**	**681.1478**	**0.1334**	**0.0000**	**683.9500**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**35.12**	**0.00**	**16.41**	**43.34**	**0.00**	**11.67**	**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	0.6062	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Energy	0.0127	0.1154	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	381.7761	381.7761	0.0142	4.7400e-003	383.5430
Mobile	1.1252	2.8310	11.2769	0.0290	1.9557	0.0408	1.9966	0.5234	0.0376	0.5610	0.0000	2,106.5429	2,106.5429	0.0787	0.0000	2,108.1960
Waste						0.0000	0.0000		0.0000	0.0000	148.7173	0.0000	148.7173	8.7889	0.0000	333.2850

Water						0.0000	0.0000		0.0000	0.0000	2.4993	43.9099	46.4091	0.2587	6.4800e-003	53.8506
Total	**1.7441**	**2.9464**	**11.3755**	**0.0297**	**1.9557**	**0.0496**	**2.0053**	**0.5234**	**0.0464**	**0.5698**	**151.2165**	**2,532.2321**	**2,683.4486**	**9.1406**	**0.0112**	**2,878.8780**

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	0.6062	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Energy	0.0127	0.1154	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	381.7761	381.7761	0.0142	4.7400e-003	383.5430
Mobile	1.1252	2.8310	11.2769	0.0290	1.9557	0.0408	1.9966	0.5234	0.0376	0.5610	0.0000	2,106.5429	2,106.5429	0.0787	0.0000	2,108.1960
Waste						0.0000	0.0000		0.0000	0.0000	148.7173	0.0000	148.7173	8.7889	0.0000	333.2850
Water						0.0000	0.0000		0.0000	0.0000	2.4993	43.9099	46.4091	0.2587	6.4700e-003	53.8466
Total	**1.7441**	**2.9464**	**11.3755**	**0.0297**	**1.9557**	**0.0496**	**2.0053**	**0.5234**	**0.0464**	**0.5698**	**151.2165**	**2,532.2321**	**2,683.4486**	**9.1405**	**0.0112**	**2,878.8740**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.09**	**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	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	

3	Grading	Grading	2/11/2017	3/10/2017	5	20	
4	Building Construction	Building Construction	3/11/2017	6/15/2018	5	330	
5	Architectural Coating	Architectural Coating	2/24/2018	6/15/2018	5	80	
6	Paving	Paving	6/16/2018	7/13/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 190,500; Non-Residential Outdoor: 63,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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

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	207.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	188.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0224	0.0000	0.0224	3.4000e-003	0.0000	3.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8292
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**0.0224**	**0.0213**	**0.0437**	**3.4000e-003**	**0.0198**	**0.0232**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8292**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7500e-003	0.0277	0.0219	8.0000e-005	1.7700e-003	4.1000e-004	2.1800e-003	4.9000e-004	3.7000e-004	8.6000e-004	0.0000	6.8648	6.8648	5.0000e-005	0.0000	6.8659
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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**2.2900e-003**	**0.0285**	**0.0302**	**1.0000e-004**	**3.4200e-003**	**4.2000e-004**	**3.8400e-003**	**9.3000e-004**	**3.8000e-004**	**1.3100e-003**	**0.0000**	**8.3475**	**8.3475**	**1.3000e-004**	**0.0000**	**8.3501**

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					8.7500e-003	0.0000	8.7500e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8291
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**	**8.7500e-003**	**0.0213**	**0.0300**	**1.3300e-003**	**0.0198**	**0.0211**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	1.7500e-003	0.0277	0.0219	8.0000e-005	1.7700e-003	4.1000e-004	2.1800e-003	4.9000e-004	3.7000e-004	8.6000e-004	0.0000	6.8648	6.8648	5.0000e-005	0.0000	6.8659
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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**2.2900e-003**	**0.0285**	**0.0302**	**1.0000e-004**	**3.4200e-003**	**4.2000e-004**	**3.8400e-003**	**9.3000e-004**	**3.8000e-004**	**1.3100e-003**	**0.0000**	**8.3475**	**8.3475**	**1.3000e-004**	**0.0000**	**8.3501**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	**0.0242**	**0.2588**	**0.1970**	**2.0000e-004**	**0.0903**	**0.0138**	**0.1041**	**0.0497**	**0.0127**	**0.0623**	**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

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	3.2000e-004	4.8000e-004	4.9700e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8906
Total	**3.2000e-004**	**4.8000e-004**	**4.9700e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8906**

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					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	**0.0242**	**0.2588**	**0.1970**	**2.0000e-004**	**0.0352**	**0.0138**	**0.0490**	**0.0194**	**0.0127**	**0.0320**	**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

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	3.2000e-004	4.8000e-004	4.9700e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8906
Total	**3.2000e-004**	**4.8000e-004**	**4.9700e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8906**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0656	0.0000	0.0656	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0346	0.3598	0.2538	3.0000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	27.6117	27.6117	8.4600e-003	0.0000	27.7893
Total	**0.0346**	**0.3598**	**0.2538**	**3.0000e-004**	**0.0656**	**0.0204**	**0.0860**	**0.0337**	**0.0188**	**0.0525**	**0.0000**	**27.6117**	**27.6117**	**8.4600e-003**	**0.0000**	**27.7893**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5900e-003	0.0252	0.0199	7.0000e-005	1.6100e-003	3.7000e-004	1.9800e-003	4.4000e-004	3.4000e-004	7.8000e-004	0.0000	6.2347	6.2347	4.0000e-005	0.0000	6.2357
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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**2.1300e-003**	**0.0260**	**0.0281**	**9.0000e-005**	**3.2600e-003**	**3.8000e-004**	**3.6400e-003**	**8.8000e-004**	**3.5000e-004**	**1.2300e-003**	**0.0000**	**7.7174**	**7.7174**	**1.2000e-004**	**0.0000**	**7.7199**

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					0.0256	0.0000	0.0256	0.0131	0.0000	0.0131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0346	0.3598	0.2538	3.0000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	27.6117	27.6117	8.4600e-003	0.0000	27.7893
Total	**0.0346**	**0.3598**	**0.2538**	**3.0000e-004**	**0.0256**	**0.0204**	**0.0460**	**0.0131**	**0.0188**	**0.0319**	**0.0000**	**27.6117**	**27.6117**	**8.4600e-003**	**0.0000**	**27.7893**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5900e-003	0.0252	0.0199	7.0000e-005	1.6100e-003	3.7000e-004	1.9800e-003	4.4000e-004	3.4000e-004	7.8000e-004	0.0000	6.2347	6.2347	4.0000e-005	0.0000	6.2357
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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**2.1300e-003**	**0.0260**	**0.0281**	**9.0000e-005**	**3.2600e-003**	**3.8000e-004**	**3.6400e-003**	**8.8000e-004**	**3.5000e-004**	**1.2300e-003**	**0.0000**	**7.7174**	**7.7174**	**1.2000e-004**	**0.0000**	**7.7199**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3258	2.7726	1.9036	2.8100e-003		0.1870	0.1870		0.1757	0.1757	0.0000	251.4531	251.4531	0.0619	0.0000	252.7527
Total	**0.3258**	**2.7726**	**1.9036**	**2.8100e-003**		**0.1870**	**0.1870**		**0.1757**	**0.1757**	**0.0000**	**251.4531**	**251.4531**	**0.0619**	**0.0000**	**252.7527**

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	0.0179	0.1822	0.2435	4.8000e-004	0.0136	2.7900e-003	0.0164	3.8700e-003	2.5600e-003	6.4400e-003	0.0000	42.7893	42.7893	3.1000e-004	0.0000	42.7957
Worker	0.0200	0.0296	0.3076	7.5000e-004	0.0611	5.0000e-004	0.0616	0.0162	4.6000e-004	0.0167	0.0000	55.0065	55.0065	2.8400e-003	0.0000	55.0662
Total	**0.0379**	**0.2118**	**0.5511**	**1.2300e-003**	**0.0746**	**3.2900e-003**	**0.0779**	**0.0201**	**3.0200e-003**	**0.0231**	**0.0000**	**97.7958**	**97.7958**	**3.1500e-003**	**0.0000**	**97.8619**

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	0.3258	2.7726	1.9036	2.8100e-003		0.1870	0.1870		0.1757	0.1757	0.0000	251.4528	251.4528	0.0619	0.0000	252.7524
Total	**0.3258**	**2.7726**	**1.9036**	**2.8100e-003**		**0.1870**	**0.1870**		**0.1757**	**0.1757**	**0.0000**	**251.4528**	**251.4528**	**0.0619**	**0.0000**	**252.7524**

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	0.0179	0.1822	0.2435	4.8000e-004	0.0136	2.7900e-003	0.0164	3.8700e-003	2.5600e-003	6.4400e-003	0.0000	42.7893	42.7893	3.1000e-004	0.0000	42.7957
Worker	0.0200	0.0296	0.3076	7.5000e-004	0.0611	5.0000e-004	0.0616	0.0162	4.6000e-004	0.0167	0.0000	55.0065	55.0065	2.8400e-003	0.0000	55.0662
Total	**0.0379**	**0.2118**	**0.5511**	**1.2300e-003**	**0.0746**	**3.2900e-003**	**0.0779**	**0.0201**	**3.0200e-003**	**0.0231**	**0.0000**	**97.7958**	**97.7958**	**3.1500e-003**	**0.0000**	**97.8619**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1601	1.3957	1.0520	1.6100e-003		0.0897	0.0897		0.0843	0.0843	0.0000	142.0618	142.0618	0.0348	0.0000	142.7919
Total	**0.1601**	**1.3957**	**1.0520**	**1.6100e-003**		**0.0897**	**0.0897**		**0.0843**	**0.0843**	**0.0000**	**142.0618**	**142.0618**	**0.0348**	**0.0000**	**142.7919**

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	9.5900e-003	0.0956	0.1333	2.7000e-004	7.7600e-003	1.5000e-003	9.2600e-003	2.2100e-003	1.3800e-003	3.5900e-003	0.0000	24.0408	24.0408	1.7000e-004	0.0000	24.0445
Worker	0.0103	0.0153	0.1592	4.3000e-004	0.0349	2.8000e-004	0.0352	9.2700e-003	2.6000e-004	9.5200e-003	0.0000	30.2591	30.2591	1.5100e-003	0.0000	30.2907
Total	**0.0199**	**0.1109**	**0.2925**	**7.0000e-004**	**0.0427**	**1.7800e-003**	**0.0444**	**0.0115**	**1.6400e-003**	**0.0131**	**0.0000**	**54.2999**	**54.2999**	**1.6800e-003**	**0.0000**	**54.3352**

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	0.1601	1.3957	1.0520	1.6100e-003		0.0897	0.0897		0.0843	0.0843	0.0000	142.0616	142.0616	0.0348	0.0000	142.7917
Total	**0.1601**	**1.3957**	**1.0520**	**1.6100e-003**		**0.0897**	**0.0897**		**0.0843**	**0.0843**	**0.0000**	**142.0616**	**142.0616**	**0.0348**	**0.0000**	**142.7917**

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	9.5900e-003	0.0956	0.1333	2.7000e-004	7.7600e-003	1.5000e-003	9.2600e-003	2.2100e-003	1.3800e-003	3.5900e-003	0.0000	24.0408	24.0408	1.7000e-004	0.0000	24.0445
Worker	0.0103	0.0153	0.1592	4.3000e-004	0.0349	2.8000e-004	0.0352	9.2700e-003	2.6000e-004	9.5200e-003	0.0000	30.2591	30.2591	1.5100e-003	0.0000	30.2907
Total	**0.0199**	**0.1109**	**0.2925**	**7.0000e-004**	**0.0427**	**1.7800e-003**	**0.0444**	**0.0115**	**1.6400e-003**	**0.0131**	**0.0000**	**54.2999**	**54.2999**	**1.6800e-003**	**0.0000**	**54.3352**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4716					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0802	0.0742	1.2000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	10.2130	10.2130	9.7000e-004	0.0000	10.2334
Total	**1.4836**	**0.0802**	**0.0742**	**1.2000e-004**		**6.0200e-003**	**6.0200e-003**		**6.0200e-003**	**6.0200e-003**	**0.0000**	**10.2130**	**10.2130**	**9.7000e-004**	**0.0000**	**10.2334**

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	1.4200e-003	2.1200e-003	0.0220	6.0000e-005	4.8300e-003	4.0000e-005	4.8700e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	4.1868	4.1868	2.1000e-004	0.0000	4.1912
Total	**1.4200e-003**	**2.1200e-003**	**0.0220**	**6.0000e-005**	**4.8300e-003**	**4.0000e-005**	**4.8700e-003**	**1.2800e-003**	**4.0000e-005**	**1.3200e-003**	**0.0000**	**4.1868**	**4.1868**	**2.1000e-004**	**0.0000**	**4.1912**

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	1.4716					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0120	0.0802	0.0742	1.2000e-004		6.0200e-003	6.0200e-003		6.0200e-003	6.0200e-003	0.0000	10.2130	10.2130	9.7000e-004	0.0000	10.2334
Total	**1.4836**	**0.0802**	**0.0742**	**1.2000e-004**		**6.0200e-003**	**6.0200e-003**		**6.0200e-003**	**6.0200e-003**	**0.0000**	**10.2130**	**10.2130**	**9.7000e-004**	**0.0000**	**10.2334**

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	1.4200e-003	2.1200e-003	0.0220	6.0000e-005	4.8300e-003	4.0000e-005	4.8700e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	4.1868	4.1868	2.1000e-004	0.0000	4.1912
Total	**1.4200e-003**	**2.1200e-003**	**0.0220**	**6.0000e-005**	**4.8300e-003**	**4.0000e-005**	**4.8700e-003**	**1.2800e-003**	**4.0000e-005**	**1.3200e-003**	**0.0000**	**4.1868**	**4.1868**	**2.1000e-004**	**0.0000**	**4.1912**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1716	0.1449	2.2000e-004		9.3900e-003	9.3900e-003		8.6400e-003	8.6400e-003	0.0000	20.3687	20.3687	6.3400e-003	0.0000	20.5019
Paving	2.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0182**	**0.1716**	**0.1449**	**2.2000e-004**		**9.3900e-003**	**9.3900e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**20.3687**	**20.3687**	**6.3400e-003**	**0.0000**	**20.5019**

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	4.8000e-004	7.2000e-004	7.5100e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4273	1.4273	7.0000e-005	0.0000	1.4288
Total	**4.8000e-004**	**7.2000e-004**	**7.5100e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4273**	**1.4273**	**7.0000e-005**	**0.0000**	**1.4288**

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	0.0161	0.1716	0.1449	2.2000e-004		9.3900e-003	9.3900e-003		8.6400e-003	8.6400e-003	0.0000	20.3687	20.3687	6.3400e-003	0.0000	20.5019
Paving	2.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0182**	**0.1716**	**0.1449**	**2.2000e-004**		**9.3900e-003**	**9.3900e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**20.3687**	**20.3687**	**6.3400e-003**	**0.0000**	**20.5019**

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	4.8000e-004	7.2000e-004	7.5100e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4273	1.4273	7.0000e-005	0.0000	1.4288
Total	**4.8000e-004**	**7.2000e-004**	**7.5100e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4273**	**1.4273**	**7.0000e-005**	**0.0000**	**1.4288**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1252	2.8310	11.2769	0.0290	1.9557	0.0408	1.9966	0.5234	0.0376	0.5610	0.0000	2,106.5429	2,106.5429	0.0787	0.0000	2,108.1960
Unmitigated	1.1252	2.8310	11.2769	0.0290	1.9557	0.0408	1.9966	0.5234	0.0376	0.5610	0.0000	2,106.5429	2,106.5429	0.0787	0.0000	2,108.1960

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	1,819.05	1,152.97	1476.96	3,582,496	3,582,496
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Recreational Swimming Pool	703.50	445.90	571.20	1,577,725	1,577,725
Fast Food Restaurant w/o Drive Thru	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,522.55	1,598.87	2,048.16	5,160,221	5,160,221

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Fast Food Restaurant w/o Drive Th	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511108	0.059746	0.180859	0.139188	0.042462	0.006666	0.016153	0.032295	0.001940	0.002496	0.004377	0.000582	0.002128

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	256.1809	256.1809	0.0118	2.4400e-003	257.1835
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	256.1809	256.1809	0.0118	2.4400e-003	257.1835
NaturalGas Mitigated	0.0127	0.1154	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	125.5952	125.5952	2.4100e-003	2.3000e-003	126.3595
NaturalGas Unmitigated	0.0127	0.1154	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	125.5952	125.5952	2.4100e-003	2.3000e-003	126.3595

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					
Health Club	1.95842e+006	0.0106	0.0960	0.0806	5.8000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	104.5088	104.5088	2.0000e-003	1.9200e-003	105.1448
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
Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	395145	2.1300e-003	0.0194	0.0163	1.2000e-004		1.4700e-003	1.4700e-003		1.4700e-003	1.4700e-003	0.0000	21.0864	21.0864	4.0000e-004	3.9000e-004	21.2148
Total		**0.0127**	**0.1154**	**0.0969**	**7.0000e-004**		**8.7700e-003**	**8.7700e-003**		**8.7700e-003**	**8.7700e-003**	**0.0000**	**125.5952**	**125.5952**	**2.4000e-003**	**2.3100e-003**	**126.3595**

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					
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
Other Non-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
Recreational Swimming Pool	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
Fast Food Restaurant w/o Drive Thru	395145	2.1300e-003	0.0194	0.0163	1.2000e-004		1.4700e-003	1.4700e-003		1.4700e-003	1.4700e-003	0.0000	21.0864	21.0864	4.0000e-004	3.9000e-004	21.2148
Health Club	1.95842e+006	0.0106	0.0960	0.0806	5.8000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	104.5088	104.5088	2.0000e-003	1.9200e-003	105.1448
Total		**0.0127**	**0.1154**	**0.0969**	**7.0000e-004**		**8.7700e-003**	**8.7700e-003**		**8.7700e-003**	**8.7700e-003**	**0.0000**	**125.5952**	**125.5952**	**2.4000e-003**	**2.3100e-003**	**126.3595**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	58995	16.8824	7.8000e-004	1.6000e-004	16.9485
Health Club	836220	239.2985	0.0110	2.2800e-003	240.2350
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**256.1809**	**0.0118**	**2.4400e-003**	**257.1835**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	58995	16.8824	7.8000e-004	1.6000e-004	16.9485
Health Club	836220	239.2985	0.0110	2.2800e-003	240.2350
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**256.1809**	**0.0118**	**2.4400e-003**	**257.1835**

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	0.6062	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Unmitigated	0.6062	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-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	0.1472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4589					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Total	**0.6062**	**2.0000e-005**	**1.7100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.3000e-003**	**3.3000e-003**	**1.0000e-005**	**0.0000**	**3.4800e-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	0.1472					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4589					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3000e-003	3.3000e-003	1.0000e-005	0.0000	3.4800e-003
Total	**0.6062**	**2.0000e-005**	**1.7100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.3000e-003**	**3.3000e-003**	**1.0000e-005**	**0.0000**	**3.4800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.4091	0.2587	6.4700e-003	53.8466
Unmitigated	46.4091	0.2587	6.4800e-003	53.8506

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0.455301 / 0.0290617	1.9334	0.0149	3.7000e-004	2.3605

Health Club	5.35245 / 3.28054	32.0722	0.1758	4.4100e-003	37.1303
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	2.07001 / 1.26872	12.4036	0.0680	1.7000e-003	14.3598
Total		**46.4091**	**0.2587**	**6.4800e-003**	**53.8506**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0.455301 / 0.0290617	1.9334	0.0149	3.7000e-004	2.3603
Health Club	5.35245 / 3.28054	32.0722	0.1758	4.4000e-003	37.1276
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	2.07001 / 1.26872	12.4036	0.0680	1.7000e-003	14.3587
Total		**46.4091**	**0.2587**	**6.4700e-003**	**53.8466**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	148.7173	8.7889	0.0000	333.2850
Unmitigated	148.7173	8.7889	0.0000	333.2850

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	17.28	3.5077	0.2073	0.0000	7.8610
Health Club	515.85	104.7129	6.1884	0.0000	234.6683
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	199.5	40.4967	2.3933	0.0000	90.7557
Total		**148.7173**	**8.7889**	**0.0000**	**333.2850**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Fast Food Restaurant w/o Drive Thru	17.28	3.5077	0.2073	0.0000	7.8610
Health Club	515.85	104.7129	6.1884	0.0000	234.6683
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	199.5	40.4967	2.3933	0.0000	90.7557
Total		**148.7173**	**8.7889**	**0.0000**	**333.2850**

9.0 Operational Offroad

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

10.0 Vegetation

WAVE UPRUSH STUDY

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October 10, 2014

Mr. Dino D'Emilia
Project Manager
Anderson Penna Partners
5106 Steveann Street
Torrance, CA 90503

Subject: **Belmont Beach and Aquatic Center – Wave Uprush Study DRAFT**
HED Project No. 2014-00006-000

Planning
Architecture
Engineering
Interior Architecture
Landscape Architecture
Construction Services

Dear Dino:

Enclosed is the final draft of the Wave Uprush Study prepared by Moffat & Nichol for this project. The report evaluates the impact of sea level rise projections and wave action at the project site under three scenarios relative to the existing breakwater: no change (***EX BW***), removal of the West one third of the breakwater (***BW2***) and removal of the East two thirds of the breakwater (***BW3***). The analysis utilizes low and high sea level rise projections for 2060 and 2100.

Following is a summary of the study's findings and conclusions:

1. ***Under both scenarios EX BW and BW2*** (no change to the existing breakwater and removal of the West one third of this structure), wave action in addition to low/high sea level rise projections for 2060 and low sea level rise projection for 2100 are unlikely to impact the proposed facility. The proposed design sets the main pool deck elevation at +17' well above the maximum run up elevation of +8.2' (BW2 and high SLR 2060). Note that all elevations indicated in this memo and the enclosed study are based on NGVD29. For reference, current Mean Sea Level is at +0.01' (NGVD29) as noted in the study.
2. ***Under both scenarios EX BW and BW2***, the high sea level rise projection for 2060 could expose the Southwest corner of the facility (closest to the shoreline) to the changing beach conditions. Both facility design and implementation of additional measurements such as nourishment, winter sand dikes or protective coastal structures can be employed to counteract erosion and safeguard this portion of the facility.
3. ***Under scenario BW3*** (removal of the East two thirds of the existing breakwater) and without appropriate preventive measures, wave action in addition to low/high sea level rise projections for 2060 and low sea level rise projection for 2100 would have an impact on the facility. It is anticipated, however, that any modifications to the existing breakwater would include measures to mitigate the effects of the increased wave action at the shoreline. Such measures are not included in this analysis.

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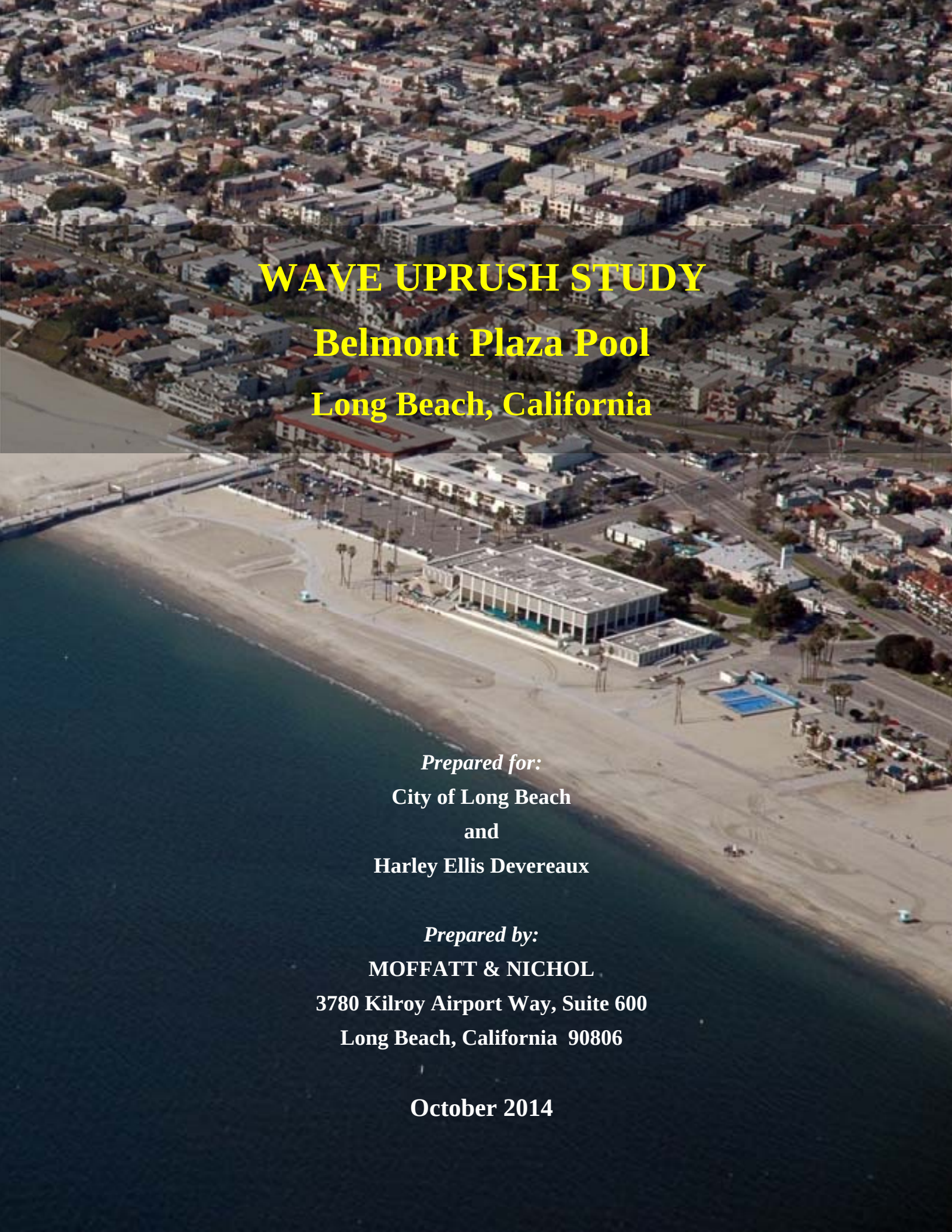
4. ***Under all scenarios*** and without appropriate preventive measures, the high sea level rise projections for 2100 would have a significant impact on the facility. Both the project site as well as much of the Long Beach Peninsula and Belmont Shore would be exposed to coastal flooding. Although the proposed design sets the main pool deck elevation at +17' (above the projected run-up/still water elevation of +10.4'), the lower level of the building (pool equipment and storage) as well as the entire site, parking and vicinity would be below the projected water line.

The enclosed report includes assumptions, analysis and graphics outlining the process and conclusions. We look forward to discussing the contents of this document with you and City staff and its impact to the proposed project.

Sincerely,

Diego Matzkin, AIA
Project Manager



WAVE UPRUSH STUDY

Belmont Plaza Pool

Long Beach, California

Prepared for:

City of Long Beach

and

Harley Ellis Devereaux

Prepared by:

MOFFATT & NICHOL

3780 Kilroy Airport Way, Suite 600

Long Beach, California 90806

October 2014

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M&N File: 8434

Cover photo credit: Bruce Perry, Department of Geological Sciences, CSU Long Beach

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EXECUTIVE SUMMARY

Planning for the reconstruction and revitalization of the Belmont Plaza Pool in Long Beach is currently underway. A key consideration is the potential vulnerability of the project site to rising sea levels. The wide and stable fronting beach may also be impacted by the potential reconfiguration of the Long Beach Breakwater, currently under consideration to be investigated in a federal feasibility study. An important part of the planning process is to assess the vulnerability of the project site to erosion and wave uprush, under various scenarios of future sea level rise and possible breakwater reconfigurations, including the breakwater remaining in its present configuration. Adaptation measures are then proposed which would mitigate any existing as well as potential future vulnerabilities.

An analysis was performed to assess the response of the beach fronting the Belmont Pool to sea level rise and a 100-year storm for a range of scenarios. The scenarios with the existing breakwater and a moderate breakwater reconfiguration yielded manageable amounts of erosion and flooding, with the exception of the upper-range 2100 sea levels. However, significant amounts of erosion and coastal flooding were predicted for: a) the upper range of 2100 sea levels (5.5 ft rise) with all breakwater configurations and b) the most significant breakwater reconfiguration alternative for all future sea level rise scenarios. None of the modeled scenarios accounted for potential future coastal protection responses that may be employed along the length of the Long Beach shoreline to address the effects of high sea level rise and breakwater modifications. The high 2100 SLR scenarios would present an especially challenging circumstance to all the Southern California coastal communities. For the remaining modeled scenarios, coastal management practices such as beach nourishment, storm berm construction, and beach grooming would mitigate the effects of SLR and the 100-year storm.

This analysis is intended to address California Coastal Commission requirements, including their *Beach Erosion and Response Guidance Document* (1999) and *Draft Sea-Level Rise Policy Guidance* (2013), as well as to serve as a basis of design.

1.0 INTRODUCTION

The Belmont Plaza Pool is located in Long Beach, California, two miles northwest of the Alamitos Bay Jetties and within the Long Beach Outer Harbor (Figure 1). The pool originally opened in 1968 but closed in 2013 due to structural deficiencies. To aid in the development of a replacement facility, an analysis of beach erosion and maximum wave run-up during storm and sea level rise events was conducted. The analysis approach was developed to be in general conformance with the California Coastal Commission (CCC) guidance on preparation of wave uprush studies for Coastal Development Permits, including CCC recommendations within their Draft Sea-Level Rise Policy Guidance released on October 14, 2013.

Wave run-up is the condition of waves breaking on the beach and water “running up” the beach face and/or beachfront structure. Wave run-up extends farther landward than the “still water” level. Wave run-up is a function of wave conditions which in turn are based on storm events, shoreline geometry, and still water level. The landward extents of the still water and run-up elevations (i.e. the intersection of these elevations onto the beach) are based on the “profile” of the beach face.

A two-phase approach was used to assess the profile response to sea level rise and storm events. In the first phase, the long-term shoreline response to rising sea levels was modeled using a “profile shift” method, otherwise called the Bruun rule. This accounts for a realistic assessment of beach response, i.e. narrowing, as a direct result of rising sea levels. The second phase, the long term shifted profiles were combined with numerical modeling of storm events to inform the analysis of coastal processes and erosion potential of beaches in the vicinity of the project site. The numerical model, XBeach, is a one-or two- dimensional model for wave propagation, long waves and mean flow, sediment transport and

morphological changes of the nearshore area, beaches, dunes and back barrier during storms (Deltares 2012).

One-dimensional (cross-shore) XBeach simulations were performed for a section running through the center of the Belmont Pool site. The section originates at Ocean Blvd heading approximately 3,100 feet at 200° into Long Beach Harbor to about 30 feet of depth (Figure 2).

The beach profile was modeled for 15 scenarios involving the existing and two alternative breakwater configurations and various sea level rise projections. Breakwater reconfiguration alternatives were identified from the initial Long Beach Breakwater reconfiguration reconnaissance study, "East San Pedro Bay Ecosystem Restoration Study", (Moffatt & Nichol, 2009).

The Breakwater 2 (BW2) alternative removes the west 1/3rd of the existing Long Beach Breakwater and the Breakwater 3 (BW3) alternative removes the eastern 2/3^{rds} of the Long Beach Breakwater. The modeled scenarios and ocean conditions are described in Section 3. Note that none of modeled scenarios account for adaptive shore protection measures such as beach nourishments, storm berm construction, or other shore protection structures that would likely be required for any of the breakwater reconfiguration alternatives.

It is important to note here that the referenced breakwater reconfiguration study was very limited in modeling scope. For example, only one wave condition from the west and one from the south were evaluated in the analysis. No investigation of the sensitivity of wave conditions inside the reconfigured breakwater to wave direction and period was performed. Hence, any conclusions drawn in this study regarding shoreline impacts resulting from any breakwater reconfiguration should be considered preliminary.

Figure 1: Location Map

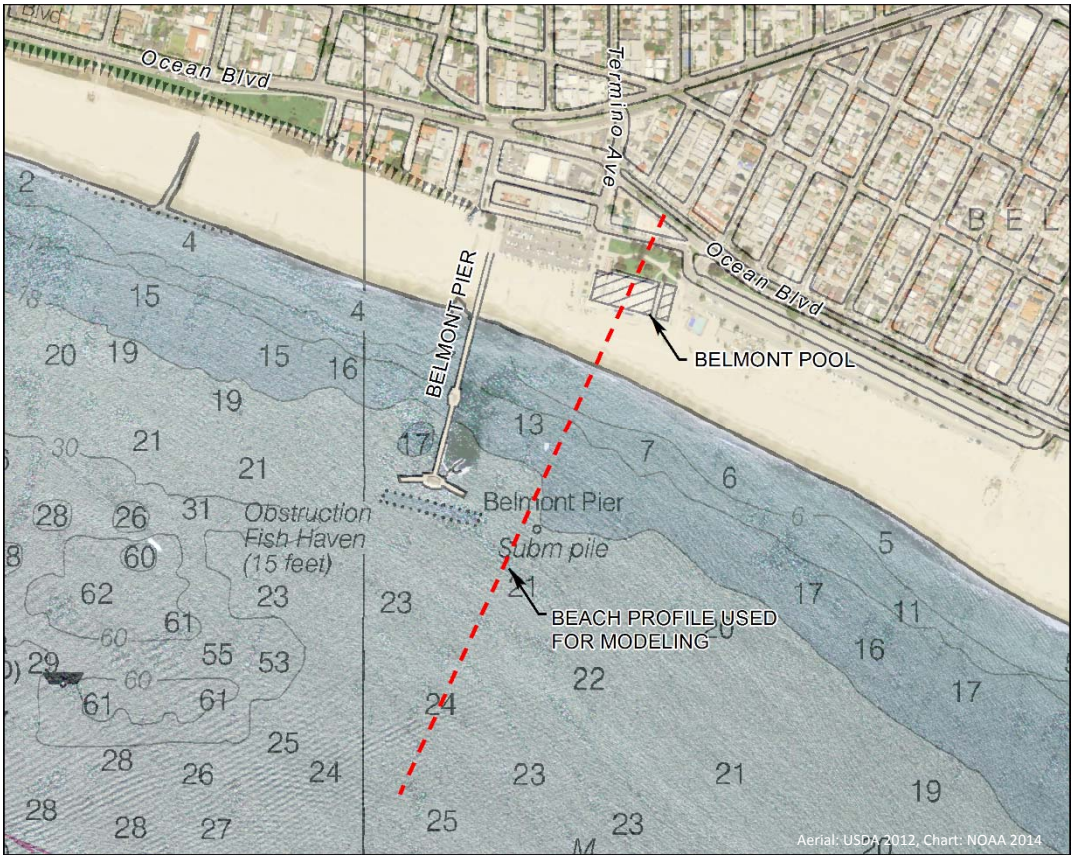


Figure 2: Site Map (Point Depths Relative to MLLW)

2.0 EXISTING BEACH PROFILE

The existing profile was created by merging two data sources: the 2013 NOAA Coastal California TopoBathy Merge Project and the 2010 Santa Monica NOAA Tsunami Inundation Digital Elevation Model (DEM) (Dewberry 2013, Cadwell et al 2011). The TopoBathy data set has 3 foot resolution data and captures the upland areas down to approximately -2 feet NGVD29. The Tsunami Inundation DEM has a 1/3 arc-second resolution (31ft) and was used to capture the profile offshore of the TopoBathy data set. The source data sets were converted from NAVD88 to NGVD29 using NOAA VDATUM. The merged beach profile is shown in Figure 3, along with the Mean Higher High Water (MHHW) as reference. Tidal and geodetic datums conversions are shown in Table 1.

The current beach berm width is nearly 200 feet wide along the profile used for the run-up modeling, however is only approximately 160 feet at the west end of the structure. An 18-foot wide concrete bike path runs across the beach berm 105 feet from the pool sand wall (pool sand wall is at x = 0) on the modeled profile. Mean Higher High Water, +2.65 NGVD29, intersects the beach at about 250 feet from the sand wall on the modeled profile.

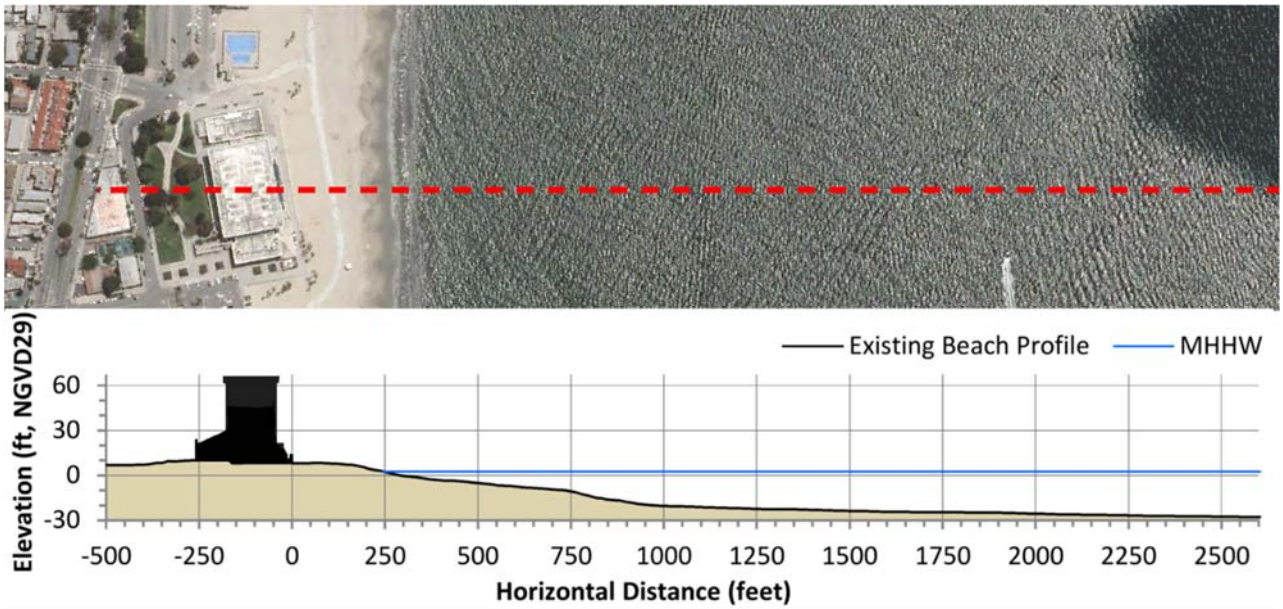


Figure 3: Existing Beach Profile
(x4 vertical Exaggeration)

Table 1: NAVD88 and Tidal Elevations Relative to the NGVD29 Vertical Datum
(VDATUM coordinate: 118.1457°, 33.7577°, Tidal Epoch 1983-2001)

Datum	Elevation (ft NGVD29)
Extreme High Water (observed January 10, 2005)	+5.08
MHHW *Mean Higher High Water*	+2.65
MHW *Mean High Water*	+1.91
MSL *Mean Sea Level*	+0.01
MLW *Mean Low Water*	-1.87
NAVD88 *North American Vertical Datum of 1988*	-2.59
MLLW *Mean Lower Low Water*	-2.80
Extreme Low Water (observed December 17,1933)	-5.53

3.0 LONG-TERM PROFILE DEVELOPMENT

3.1 Methodology

Long-term beach profile development with respect to sea level rise was modeled according to the Bruun Rule. The Bruun Rule hypothesizes that as the sea level rises, the shoreface will respond by moving landward (Figure 4). Using this equilibrium understanding, Bruun (1962) proposed that the retreat of the shoreline can be estimated by assuming that the amount of erosion on the upper part of the profile must equate to the amount of deposition on the lower part of the profile.

The amount of shoreline retreat (δy) can be estimated according to:

$$\delta y = S\frac{w}{h+B}$$

where S is the rise in the sea level, w is the width of the shoreface, h is the depth of closure, and B is the berm height. The Bruun rule is widely accepted as the approach to predict the effects of sea level rise on sandy shorelines. It is based on three assumptions: (1) the underlying geology does not play a role in determining the shoreface shape; (2) shoreface sediment is moved only by waves; and (3) there is no significant movement of sediment beyond the depth of closure.

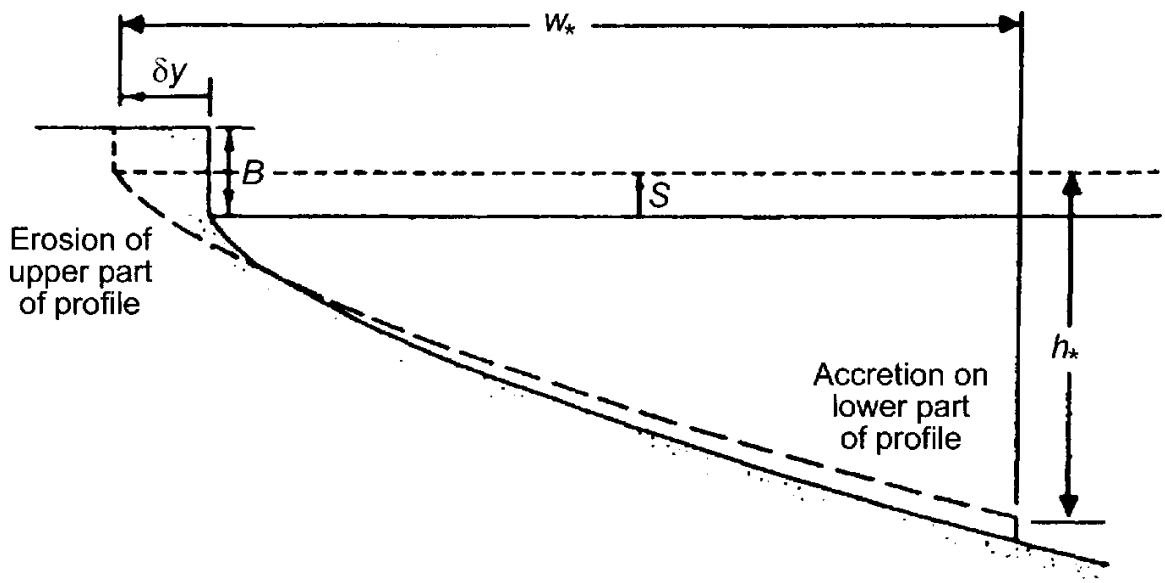


Figure 4: Response of the Shoreface Profile to Rising Sea Level according to the Bruun Rule
(from Masselink & Hughes, 2003)

The depth of closure is defined in the equation above as the most landward depth seaward of which there is no significant change in bottom elevation and no significant net exchange between the nearshore and the offshore. The depth of closure was estimated using Eq. III-3-11 from the Coastal Engineering Manual (Dean et al. 2008).

For the Bruun profiles, the berm elevation was estimated directly from measured profile. This point was taken as the first point of local maxima above the mean sea level elevation. Profiles were shifted landward and up according to the Bruun estimates.

3.2 Modeled Scenarios

The fifteen modeled scenarios are shown in the table below. Five sea level scenarios were analyzed for each of the three Long Beach Breakwater configurations.

Table 2: Modeled Scenarios

Case#	Breakwater Configuration	Sea Level Rise		
		Year	Range	Rise Relative to Current, Feet
1	Existing	2014	Current	0.0
2L	Existing	2060	Low	+0.5
2H	Existing	2060	High	+2.6
3L	Existing	2100	Low	+1.4
3H	Existing	2100	High	+5.5
4	Breakwater 2	2014	Current	0.0
5L	Breakwater 2	2060	Low	+0.5
5H	Breakwater 2	2060	High	+2.6
6L	Breakwater 2	2100	Low	+1.4
6H	Breakwater 2	2100	High	+5.5
7	Breakwater 3	2014	Current	0.0
8L	Breakwater 3	2060	Low	+0.5
8H	Breakwater 3	2060	High	+2.6
9L	Breakwater 3	2100	Low	+1.4
9H	Breakwater 3	2100	High	+5.5

3.3 Results

Since the wave protection provided by the existing breakwater and BW2 are similar, the profile for cases with the same sea level rise (SLR) values are nearly identical (Figure 7). Increases in the transmission coefficient which result from reconfiguring the breakwaters consequently increase the depth of closure. This creates additional profile recession compared to sea level rise alone.

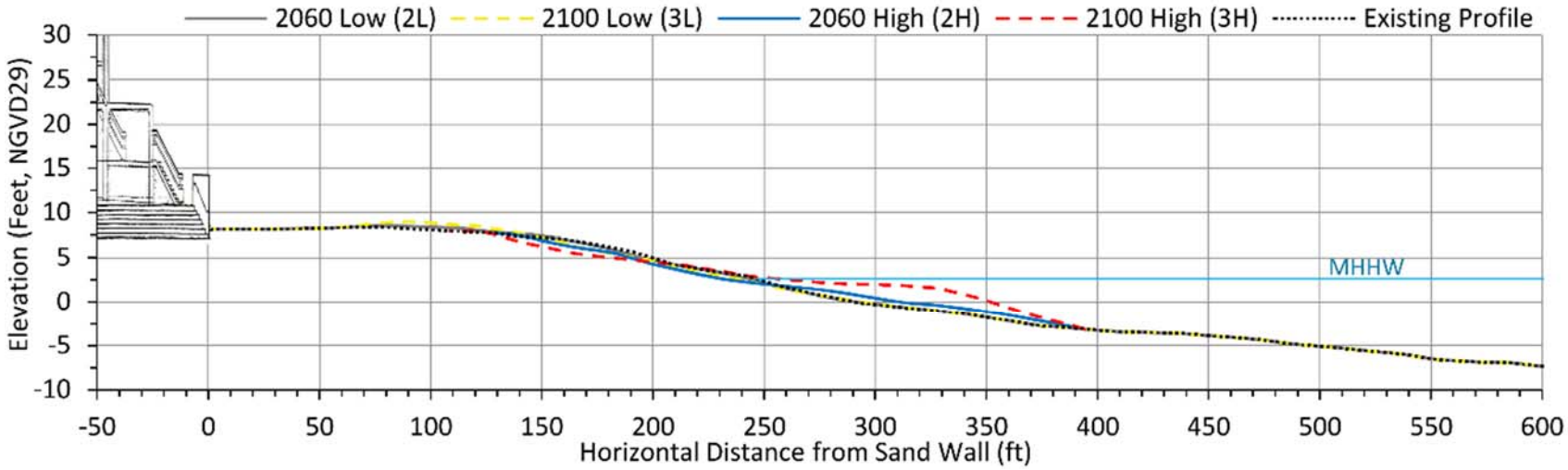


Figure 5: Bruun Profiles for Existing Breakwater Configuration
(Shown at 4x Vertical Exaggeration for clarity)

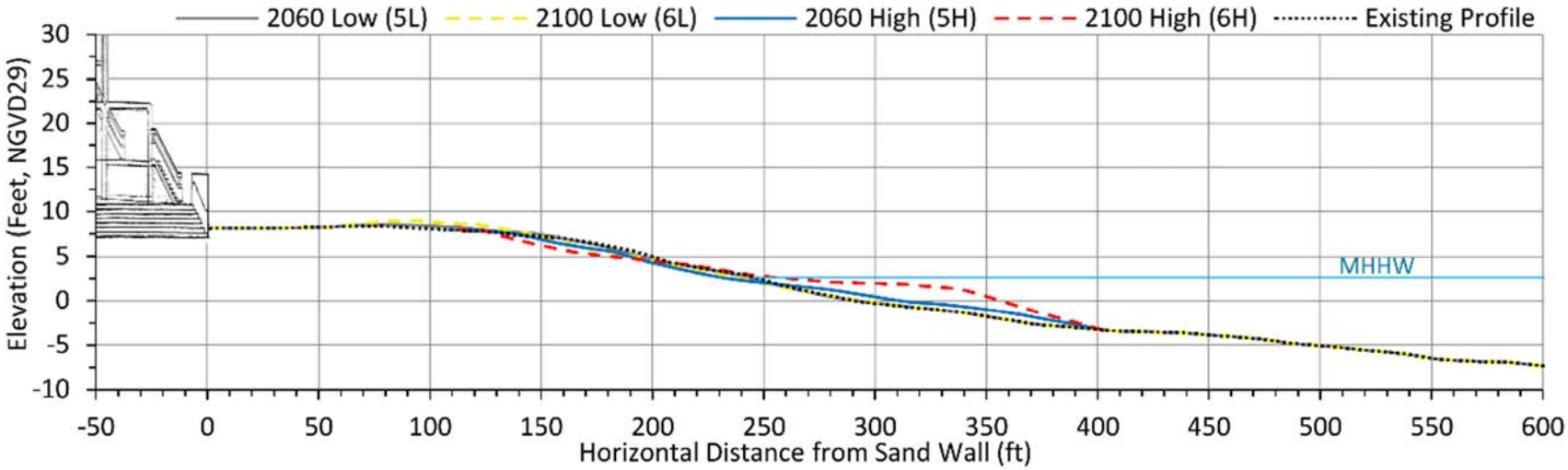


Figure 6: Bruun Profiles for Alternative BW2 Configuration
(Shown at 4x Vertical Exaggeration for clarity)

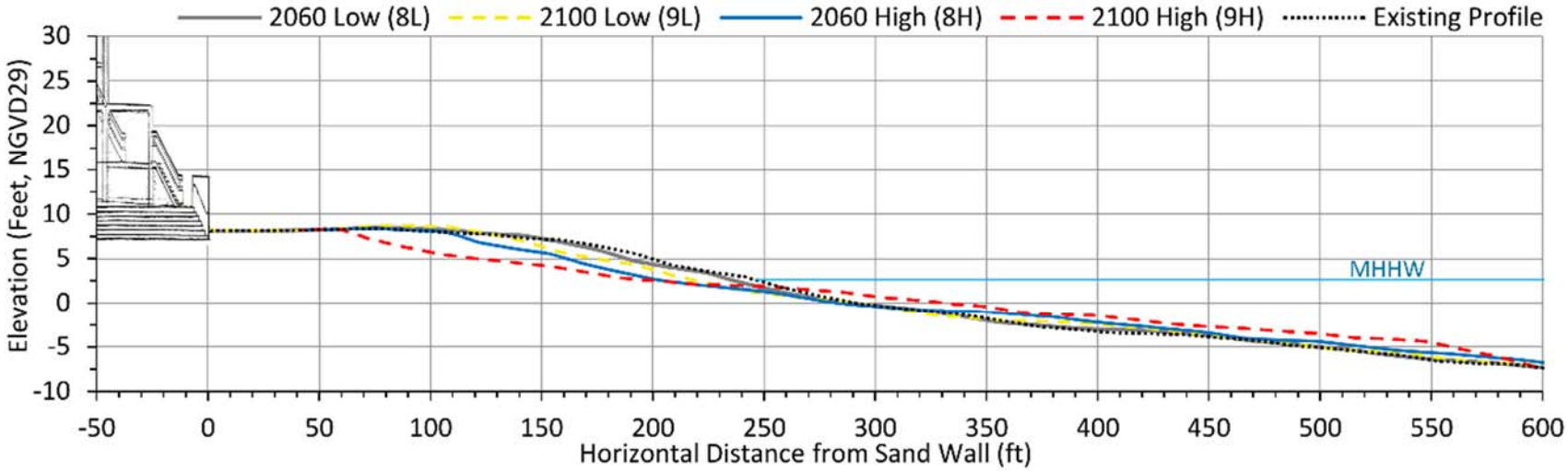


Figure 7: Bruun Profiles for Alternative BW3 Configuration
(Shown at 4x Vertical Exaggeration for clarity)

4.0 XBEACH STORM MORPHOLOGY AND WAVE RUN-UP MODELING

4.1 Model Overview

XBeach is a two-dimensional model for wave propagation, long waves and mean flow, sediment transport and morphological changes of the nearshore area, beaches, dunes and back barrier during storms (Deltares 2012). Experience has shown that structures/developments along the coast are more vulnerable to episodic storms rather than to long-term rates of recession. Therefore, the long-term/Bruun shifted profiles were combined with numerical modeling of storm events, using the model XBeach, to inform the analysis of coastal processes and erosion potential of beaches in the vicinity of the project domain.

4.2 Model Development

4.2.1 Boundary Conditions

4.2.1.1 Waves

Measured wave data applicable to the San Pedro Bay is limited, with the longest record being 10 years (CDIP 092 'San Pedro' and 096 'Dana Point') (Scripps 2014a, 2014b). Therefore, 30-year hindcast wave data from the USACE was used to develop a 100-year storm (USACE 2011). The selected WIS station is located 8.5mi offshore of Newport Harbor (Figure 8). Figure 9 shows the annual joint probability distribution plots of the WIS station including a separate plot for southern waves only. In general, the wave heights are relatively small and the largest southern waves are short period (5-7s).

Earlier modeling work conducted to analyze the effect of modifying the Long Beach Breakwater (M&N 2009) found that the Belmont Pool site is most exposed to southern waves. In addition, previous model calculated the wave transmission coefficient for the existing and modified breakwater.

Table 3 shows the calculated wave transmission coefficient used to force the XBeach offshore boundary.

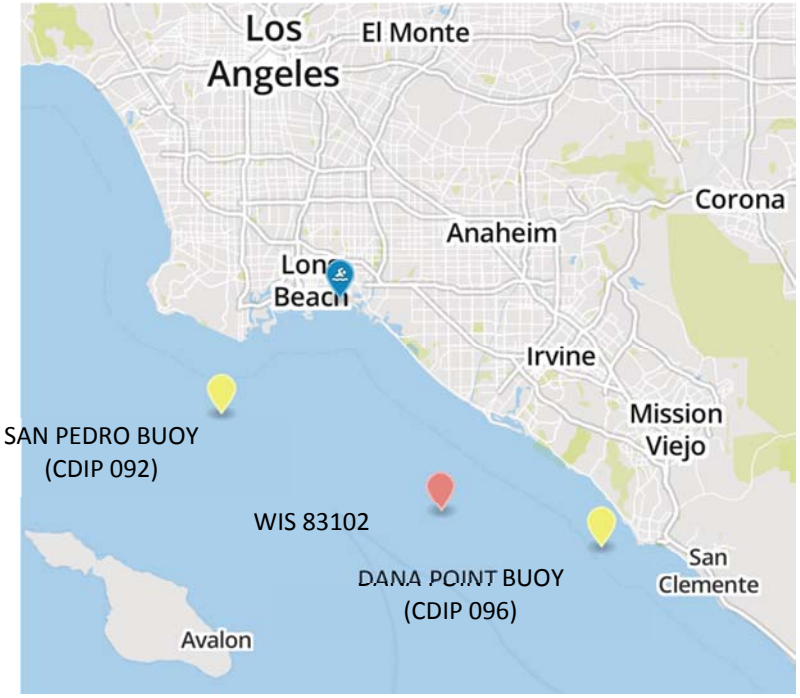
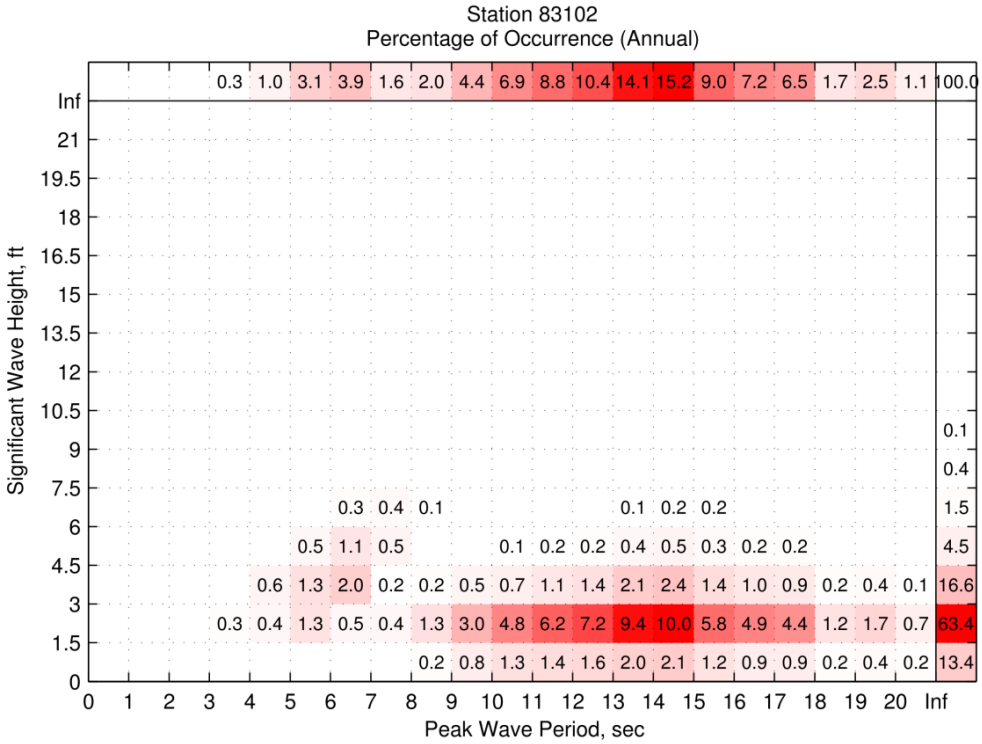


Figure 8: Buoy and Hindcast Extraction Locations

Table 3: Wave Transmission Coefficients

Scenario	Wave Transmission Coefficient
Existing	0.18
Breakwater Configuration 2 (BW2)	0.21
Breakwater Configuration 3 (BW3)	0.78



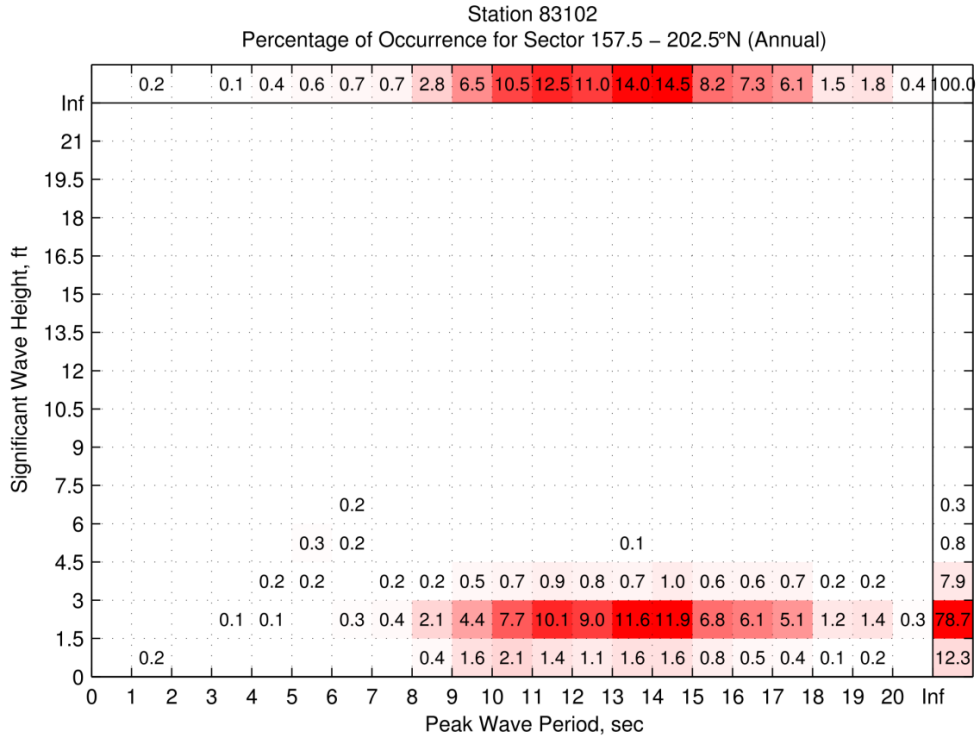


Figure 9: Annual Joint Probability Distribution between the Peak Wave Period and Significant Wave Height from WIS Station 83102.
Top – All Wave Directions; Bottom – Southern Waves Only.

The largest southern storm on the WIS record (1981-2011) occurred March 20th, 2011. The waves approached from 180-200° during the peak of the storm and reached as high as 3.35m (11ft). A comparison of the WIS hindcast results and the two closest CDIP buoys are presented in Figure 10. The San Pedro wave data is labeled 'SP', the Dana Point wave data is labeled 'DP', and the 83102 hindcast data is labeled WIS and shown with the boldest line. The wave period and wave direction measured data is shown with dotted line and a solid 2-hour moving average line. Overall, there is reasonable agreement between the hindcast (WIS) and observed (CDIP) wave heights.

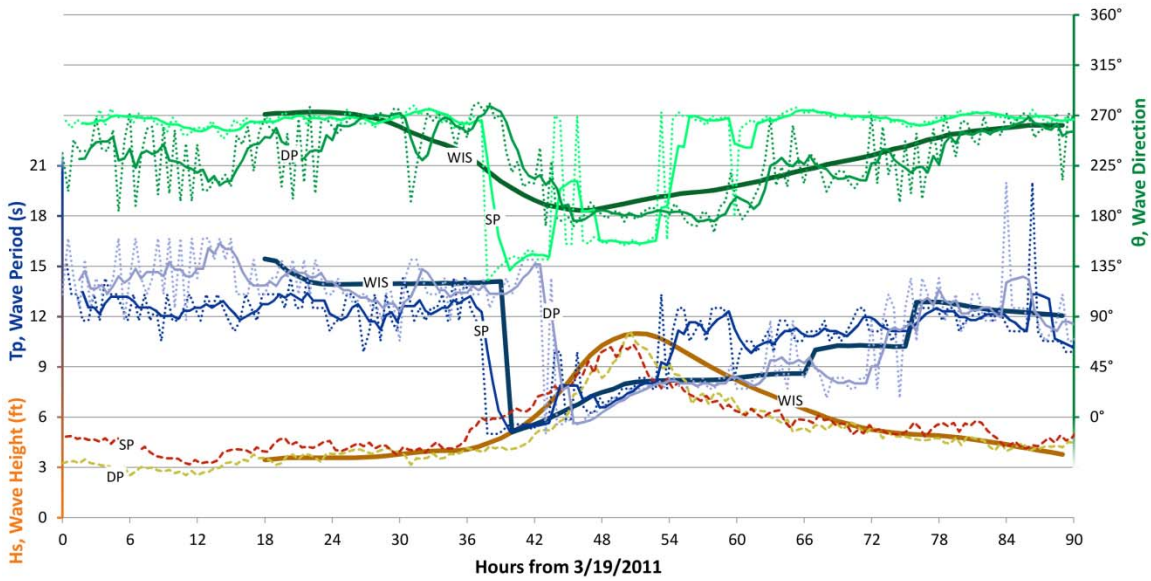


Figure 10: Wave Record Comparison

In order to evaluate the probability of occurrence of extreme wind events, a peak-over-threshold analysis was performed to isolate extreme events and determine return periods. Numerous probability density functions (Fisher-Tippett Type I, Fisher-Tippett Type II, and Weibull) were tested to determine the probability density function that provides the best fit. Return interval statics are adjusted for record length and sample interval. A selection was made based on the probability density function with the highest correlation. The analysis estimated the 100-yr southern wave to be 3.9m (12.8ft). The best fit extreme value curve used to arrive at the 100-yr estimate is shown in Figure 11.

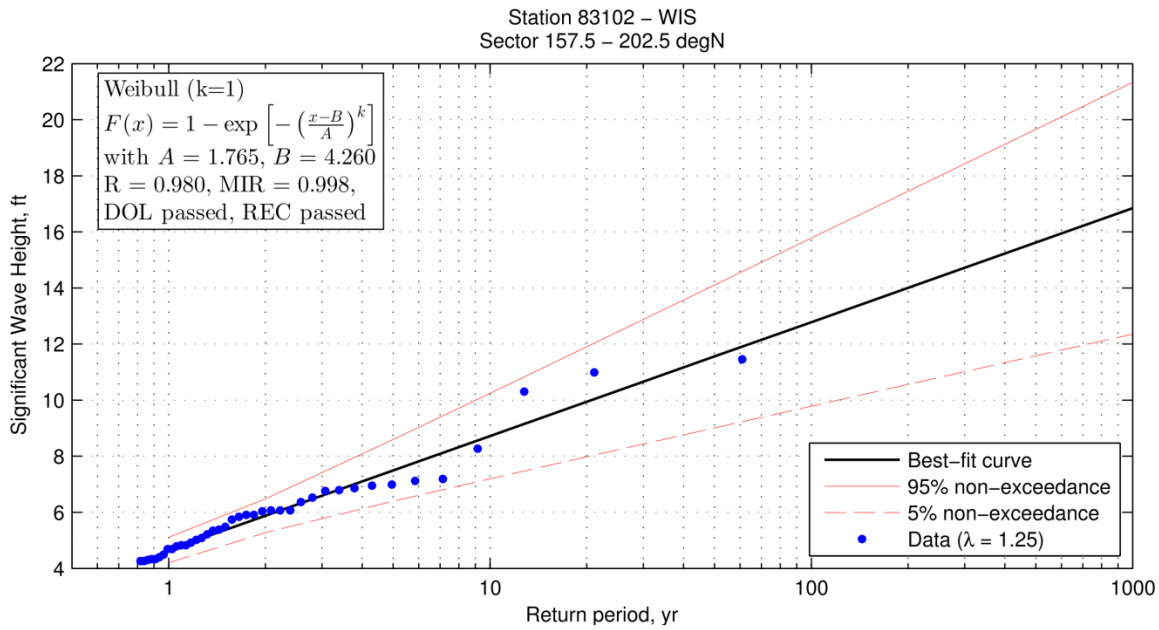


Figure 11: Significant Wave Height Extreme Value Curve

The wave heights from the 2011 storm event were then scaled up to the 100-yr wave height. Next, the storm waves were shoaled from deep water to the reference point for the wave transmission coefficients (just outside the Long Beach Breakwaters, about -50 feet depth) using linear wave theory and Snell's law. The wave transmission coefficients were then applied to shoaled 100-yr wave to create the three wave conditions. Figure 12 shows evolution of the 100 year wave and the wave parameters used to force the XBeach model. Finally, the three sets of wave parameters are used to create the JONSWAP wave spectrums that force the model.

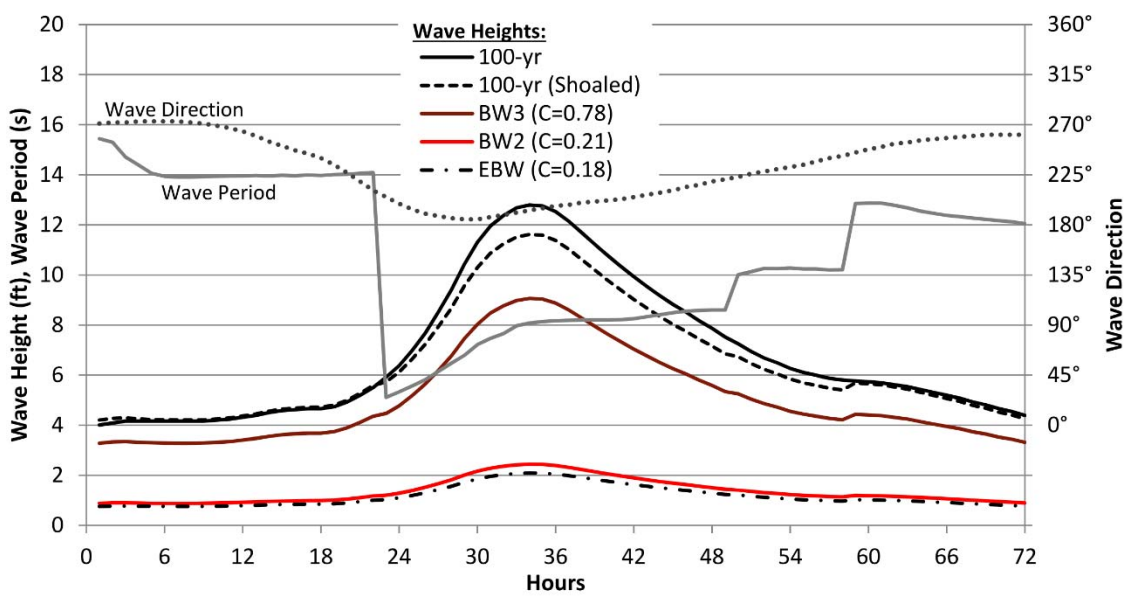


Figure 12: Modeled Storm Hydrograph

4.2.1.2 Water Levels

The Los Angeles, CA NOAA tide gauge (9410660) was used to force the XBeach water levels. A large 2012 King Tide (December 13, 2012) was selected and timed to roughly coincide with the peak of the forced wave height (Figure 13). Based on NOAA's extreme analysis on the Los Angeles tidal station, the 2012 King Tide was approximately a 30-year return period water level (NOAA 2014). The still water locations of the 2012 King Tide, MHHW, MLLW, and future SLR projections on the existing beach are shown in Figure 14.

The modeled water levels were increased by 0.4, 1.4, 2.6, and 5.5 ft to create four sea level rise scenarios for each wave condition to make a total of 15 boundary conditions. The state of California recommends using 2012 National Research Council's (NRC) range of SLR predictions for planning decisions (CO-CAT 2013, NRC 2012). The four SLR values represent the upper and lower range of SLR estimates for 2060 (0.5ft to 2.6ft) and 2100 (1.4ft to 5.5ft) (NRC 2012). These estimates for sea level rise will provide a wide range of estimates for erosion and wave run-up. The 15 boundary condition scenarios modeled are shown in Table 4.

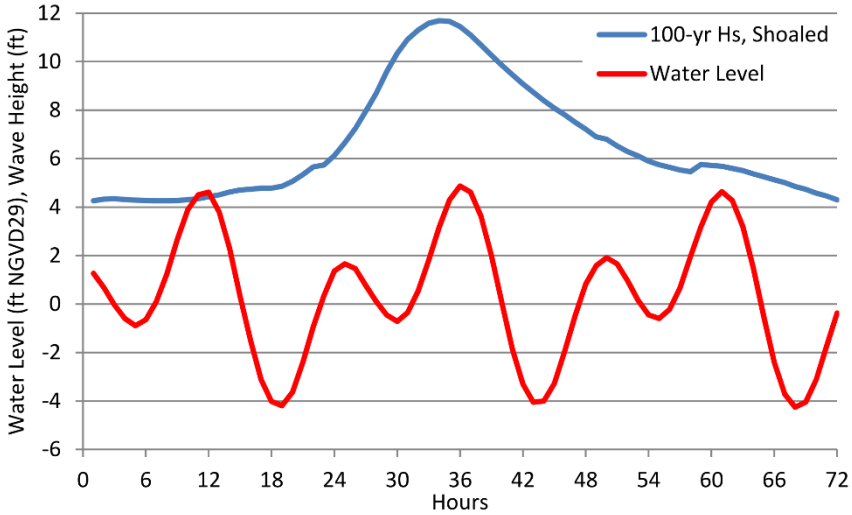


Figure 13: Forced Still Water Level for Existing Condition.

Table 4: Wave Heights for Modeled Scenarios

Case#	Breakwater Configuration	Wave Transmission Coefficient	Peak Wave Height (H_s) 100-yr Storm (ft)	SLR	
				Year	ft
1	Existing	0.18	2.09	2014	0.0
2L	Existing	0.18	2.09	2060	0.5
2H	Existing	0.18	2.09	2060	2.6
3L	Existing	0.18	2.09	2100	1.4
3H	Existing	0.18	2.09	2100	5.5
4	Breakwater 2	0.21	2.44	2014	0.0
5L	Breakwater 2	0.21	2.44	2060	0.5
5H	Breakwater 2	0.21	2.44	2060	2.6
6L	Breakwater 2	0.21	2.44	2100	1.4
6H	Breakwater 2	0.21	2.44	2100	5.5
7	Breakwater 3	0.78	9.06	2014	0.0
8L	Breakwater 3	0.78	9.06	2060	0.5
8H	Breakwater 3	0.78	9.06	2060	2.6
9L	Breakwater 3	0.78	9.06	2100	1.4
9H	Breakwater 3	0.78	9.06	2100	5.5

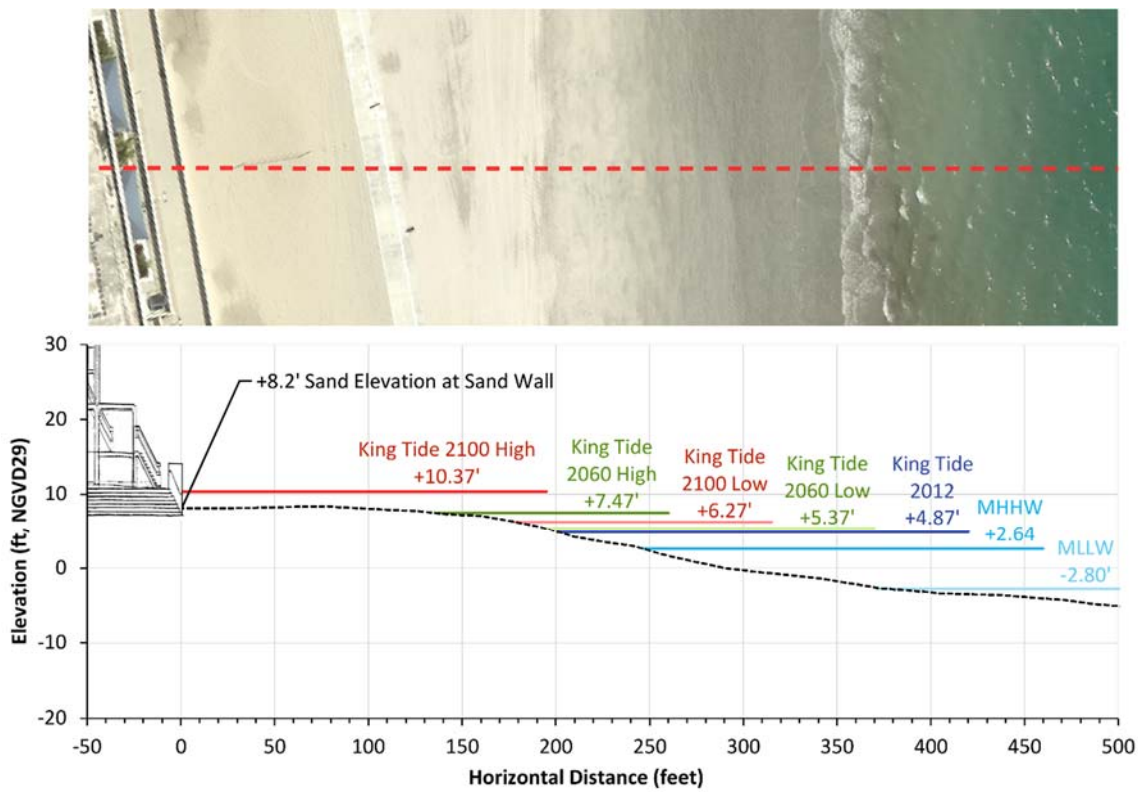


Figure 14: Still Water Level Locations on the <u>Existing Beach</u>
Shown at 4x Vertical Exaggeration for clarity)

4.2.2 Bathymetry & Computational Grid

The profiles detailed in Section 3.3 were used to create the XBeach input profiles. The beach profiles were extended offshore to a depth of 20 meters MSL (-68.2 feet NGVD29) with a 1V:100H slope. For computing efficiency, the profile point spacing varies from 23m (76ft) furthest offshore to 0.91m (3ft) on the beach according to the Courant–Friedrichs–Lewy (CFL) condition. The Bruun adjusted profiles from Section 3.3 are used for the sea level rise scenarios.

The existing pool cells were set to be non-erodible, meaning that these points on the profile will not change over time. The concrete beach path is ignored and treated as sand.

4.2.3 Model Parameters

XBeach model parameters are were largely left to their default settings. Based on prior experience with XBeach, the erosion limiter was set to 0.8. Model defaults were used for all other input parameters.

4.3 Model Results

In order to evaluate the risk of erosion seaward of the Belmont Plaza Pool property, simulations were performed to determine the beach profile response to the 100-year storm event. The storm hydrograph is presented in Figure 12. Simulations with and without sea level rise were also performed to understand

short and long term response of the profile and quantify the increase in coastal flooding (run-up). Additionally, two modifications of the Long Beach Breakwater were modeled to analyze the effects of removing portions of the breakwater. Note that none of modeled scenarios account for shore protection measures such as beach nourishment, storm berm construction, or other shore protection structures that would likely be required to accompany any significant breakwater reconfiguration. To varying scales, shore protection measures would be employed to address high sea level rise trends, reduce the impact of incoming storms, and mitigate modifications to the Long Beach Breakwater.

4.3.1 Erosion

Figure 15 shows all 15 modeled scenarios grouped by breakwater configuration. The final, post storm profiles are a result of both Bruun modeling and XBeach modeling of the 100-year storm. As suggested by the wave transmission coefficients (Table 3), the modeled profiles of the existing breakwater configuration and the BW2 configuration are very similar and difficult to differentiate on the figures. Table 5 presents the berm erosion (in horizontal feet and percent-lost compared to present day berm width), final berm width and beach width following the modeled 100-year storm. Beach width is measured as the horizontal distance between the back of the beach (the pool sand wall) and the 0 NGVD beach contour (mean sea level) plus the increase in sea level. The berm crest elevation for all runs was approximated as the high water level of the 2012 King Tide (4.87') plus the increase in sea level. The berm width is measured from the sand wall to berm crest elevation. The berm width is an important characterization as dry sandy beach is important for many recreational uses and serves as a buffer against coastal flooding. The existing berm width and beach width is 195', and 285' respectively.

The effect of sea level rise on the beach is significant. With 5.5ft of SLR, the still water level of the King Tide reaches the pool structure and a dry sandy berm is non-existent. Case 9 suggests the seaward edge of the pool structure would be subject to undermining as the sand elevation at the sand wall has dropped nearly 2 feet in post storm profile (Figure 15).

Berm erosion outpaces erosion at MHW for the modeled cases. At the end of each 100-year storm scenario the beach face has flattened and expanded. Figure 16 depicts the retreat of the berm crest in plan view. The location of the berm crest west and east of the XBEACH transect has been manually approximated using the NOAA TopoBathy dataset and historic aerial photographs.

Of the two modifications to the Long Beach Breakwater analyzed, only BW3 caused a significant change. The waves reaching the beach under the BW3 reconfiguration are over three times larger than the present. The 100-year storm modeled with present day sea levels and BW3 configuration (Case 7) eroded nearly 25% of beach berm.

A number of the modeled cases resulted in a 2 to 3-foot beach scarp located at the berm crest; the formation of beach scarps is common following large storm events, beaches with unnaturally high berms or unnaturally steep beach slopes. It is possible that the scarp may be a result of the profile being cut through the cusp embayment, or that the berm elevation is still at its pre-breakwater elevation and high compared to the sheltered wave environment.

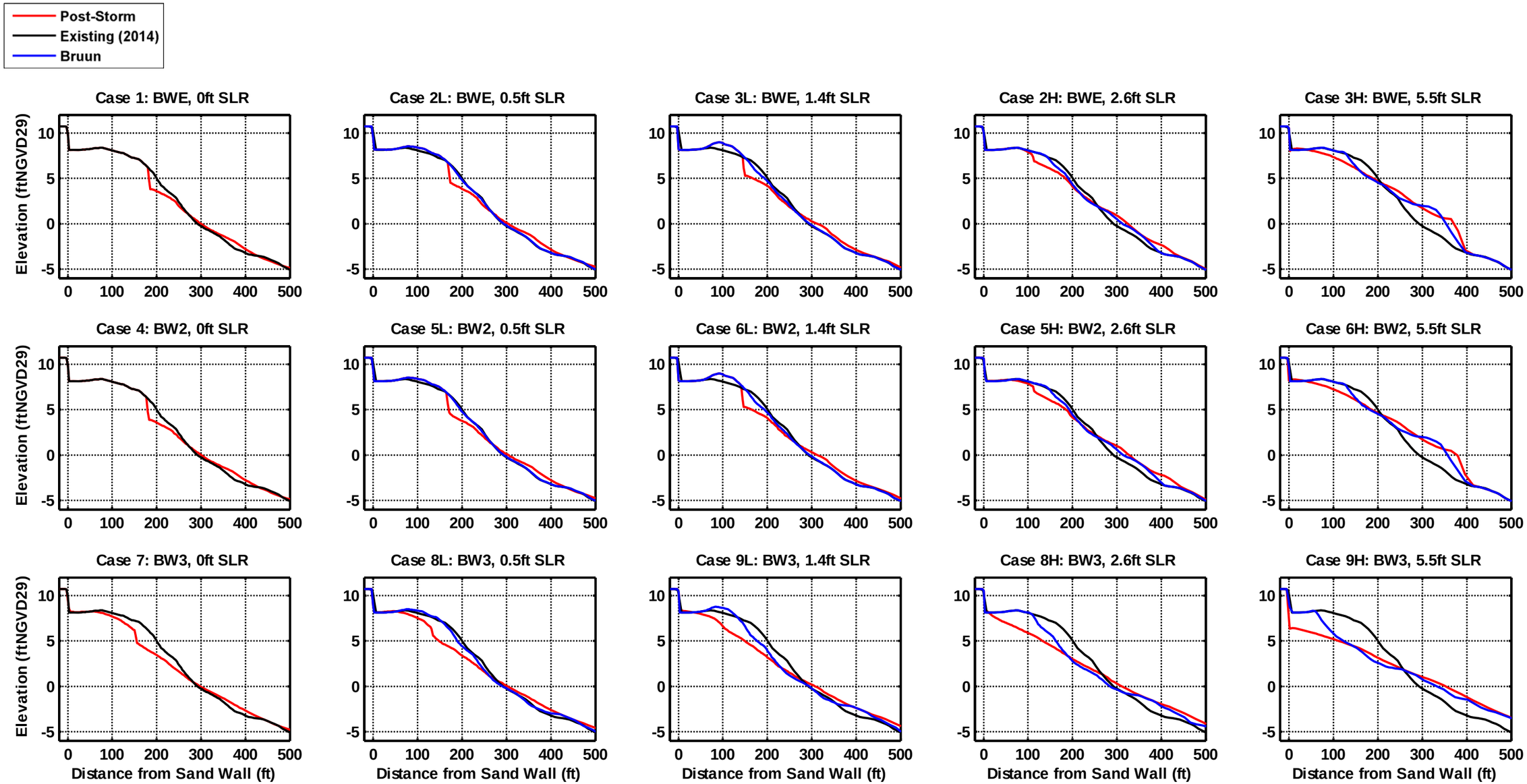


Figure 15: Modeled Beach Profiles
(Shown at over x20 vertical exaggeration for clarity)

Table 5: Erosion Model Results with 100-yr Storm Event

Case #		Year	SLR (ft)	Berm Erosion† (ft) (% loss)	Berm Width (ft)	Beach Width† (ft)
BWE	1	2014	0	24 (12%)	177	294
	2L	2060	0.5	36 (18%)	165	281
	2H	2060	2.6	97 (48%)	104	258
	3L	2100	1.4	60 (30%)	141	232
	3H	2100	5.5	201 (100%)	0	164
BW 2	4	2014	0	27 (14%)	174	294
	5L	2060	0.5	38 (19%)	163	281
	5H	2060	2.6	95 (48%)	106	258
	6L	2100	1.4	63 (31%)	138	233
	6H	2100	5.5	201 (100%)	0	164
BW 3	7	2014	0	51 (26%)	150	291
	8L	2060	0.5	67 (33%)	134	278
	8H	2060	2.6	177 (88%)	24	247
	9L	2100	1.4	100 (50%)	101	209
	9H	2100	5.5	201 (100%)	0	79

†2014 existing berm width and beach width is 195', and 285' respectively

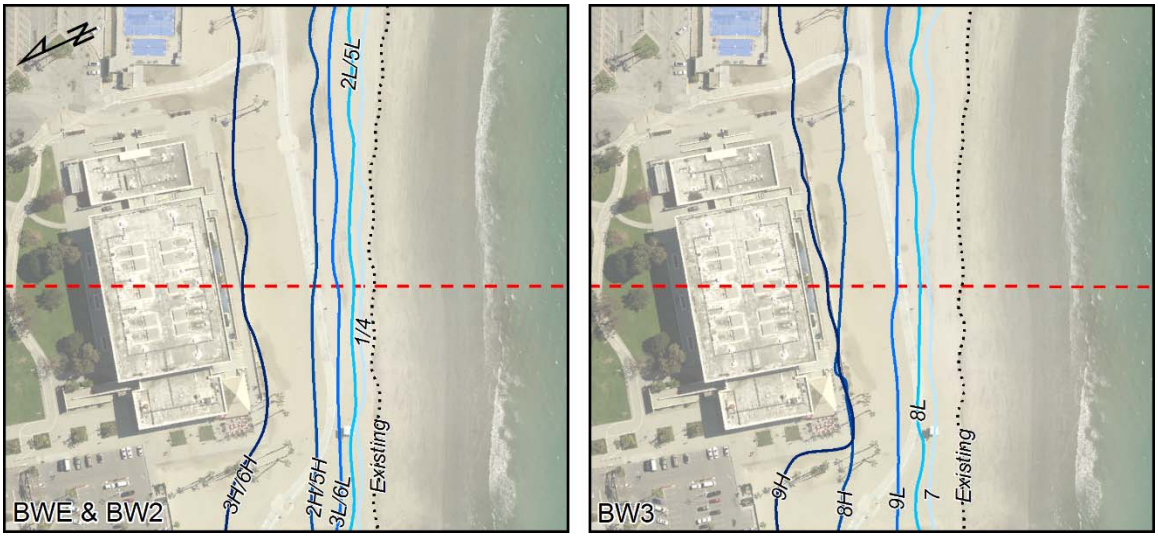


Figure 16: Approximate Berm Crest Locations near the Belmont Pool
(Note: The crest line locations along the dashed red profile line are representative of the XBEACH model results; however the crest lines elsewhere on the plan view were manually approximated from the NOAA TopoBathy dataset.)

4.3.2 Coastal Flooding and Run-up

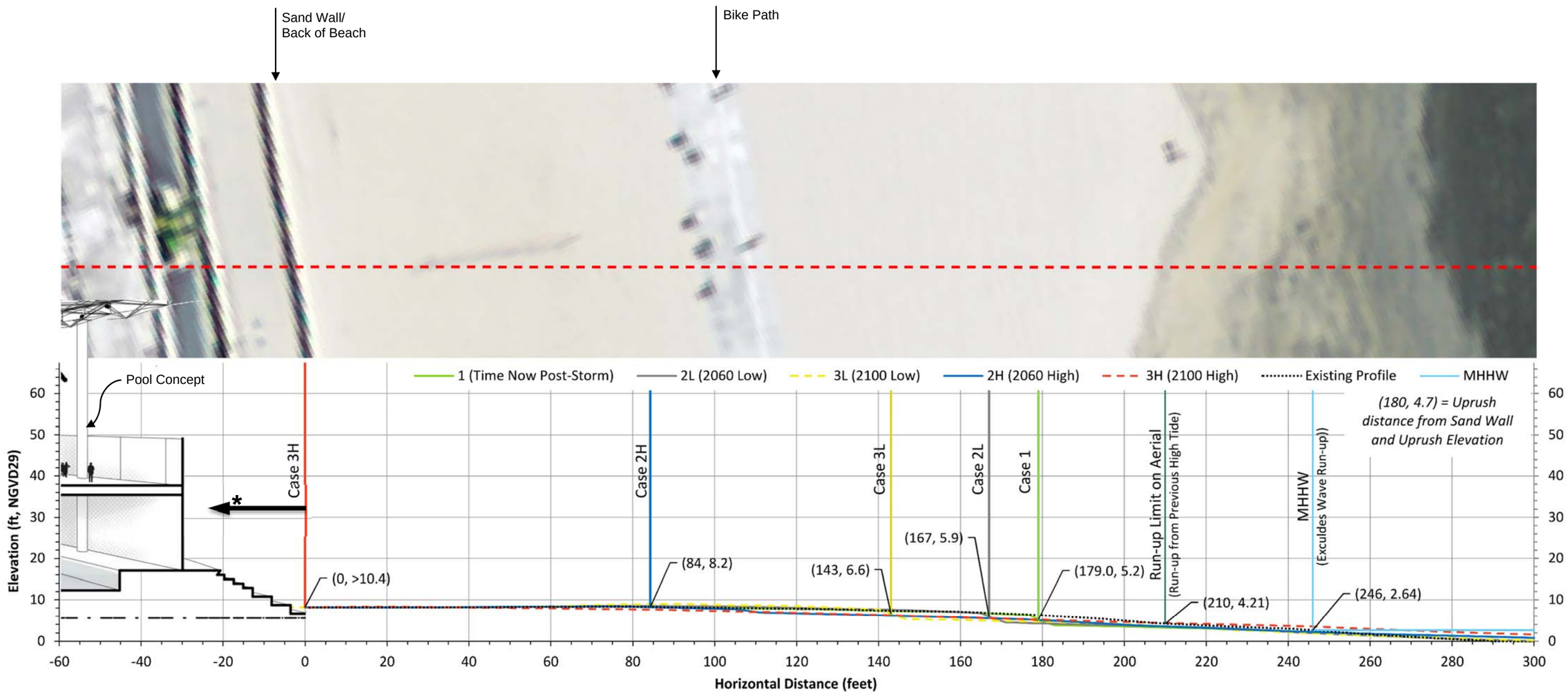
The 2% run-up level is a common metric for quantifying the maximum elevation inundated during a storm event. Statistically, the 2% run-up is the point reached or exceeded by only 2% of all waves. Therefore, the 2% run-up of a 100-year storm is a good indicator of the extent of coastal flooding. Table 6 presents the 2% run-up elevation and the horizontal distance covered by the 2% run-up beyond the existing scenario (Case 1). Figures 17 through 19 show the post-storm profiles with run-up limits. Figure 20 shows the post-storm run-up limits on a plan view graphic.

Similarly to the erosion results, the existing breakwater cases and the BW2 cases are very similar. The run-up at present day sea level for the existing breakwater (Case 1) configuration and BW2 (Case 4) reaches approximately 5 ft NGVD29. As shown in the figures and table below, the run-up reaches higher elevations with SLR and reduced wave sheltering. Due to the subtle slope of the beach berm and 3-foot grid spacing, small changes in predicted wave run-up (<0.1 feet) can lead to large changes in run-up distance (see Case 2H and 5H). The King Tide in addition to the 2100 high sea level projection (Cases 3H, 6H, and 9H) reaches 10.4 feet NGVD29 and inundates the entire beach. With the exception of Case 7, the run-up of all BW3 scenarios reaches the sand wall. With the increased wave height of Case 7, the runup reaches 3 feet higher and 117 feet further than Case 1.

Table 6: Run-up Model Results

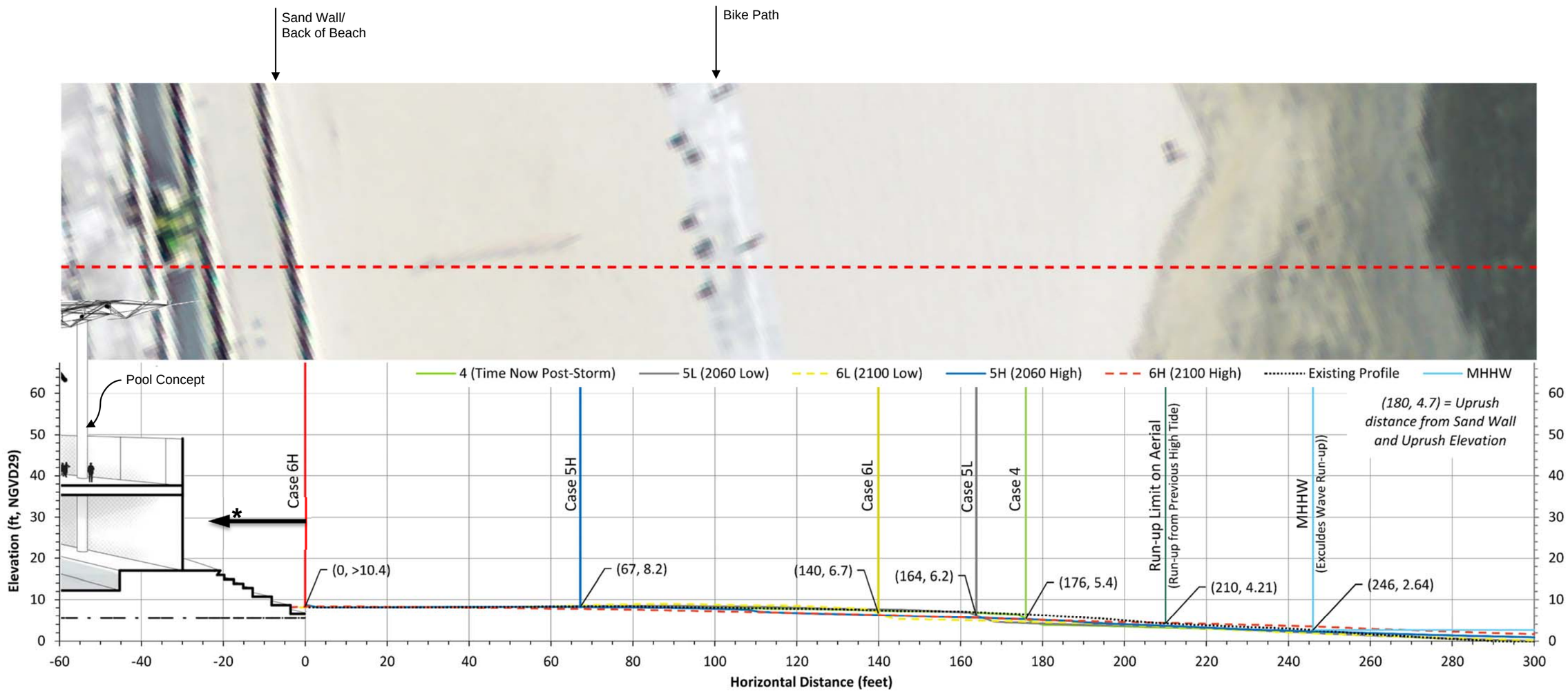
Case #		Year	SLR (ft)	2% Run-up Elevation (ft, NGVD29)	2% Run-up Distance from Sand Wall (ft)	2% Run-up Distance Beyond Case 1 (ft)
EX BW	1	2014	0	5.2	179	--
	2L	2060	0.5	5.9	167	12
	2H	2060	2.6	8.2	84	95
	3L	2100	1.4	6.6	143	36
	3H	2100	5.5	>10.4†	0	179
BW 2	4	2014	0	5.4	176	3
	5L	2060	0.5	6.2	164	15
	5H	2060	2.6	8.2	67	112
	6L	2100	1.4	6.7	140	39
	6H	2100	5.5	>10.4†	0	180
BW 3	7	2014	0	8.2	62	117
	8L	2060	0.5	>8.3	0	179
	8H	2060	2.6	>8.3	0	179
	9L	2100	1.4	>8.3	0	179
	9H	2100	5.5	>10.4†	0	179

† 10.4 is the maximum still water level during the simulation (2012 King Tide + 2100 High SLR)



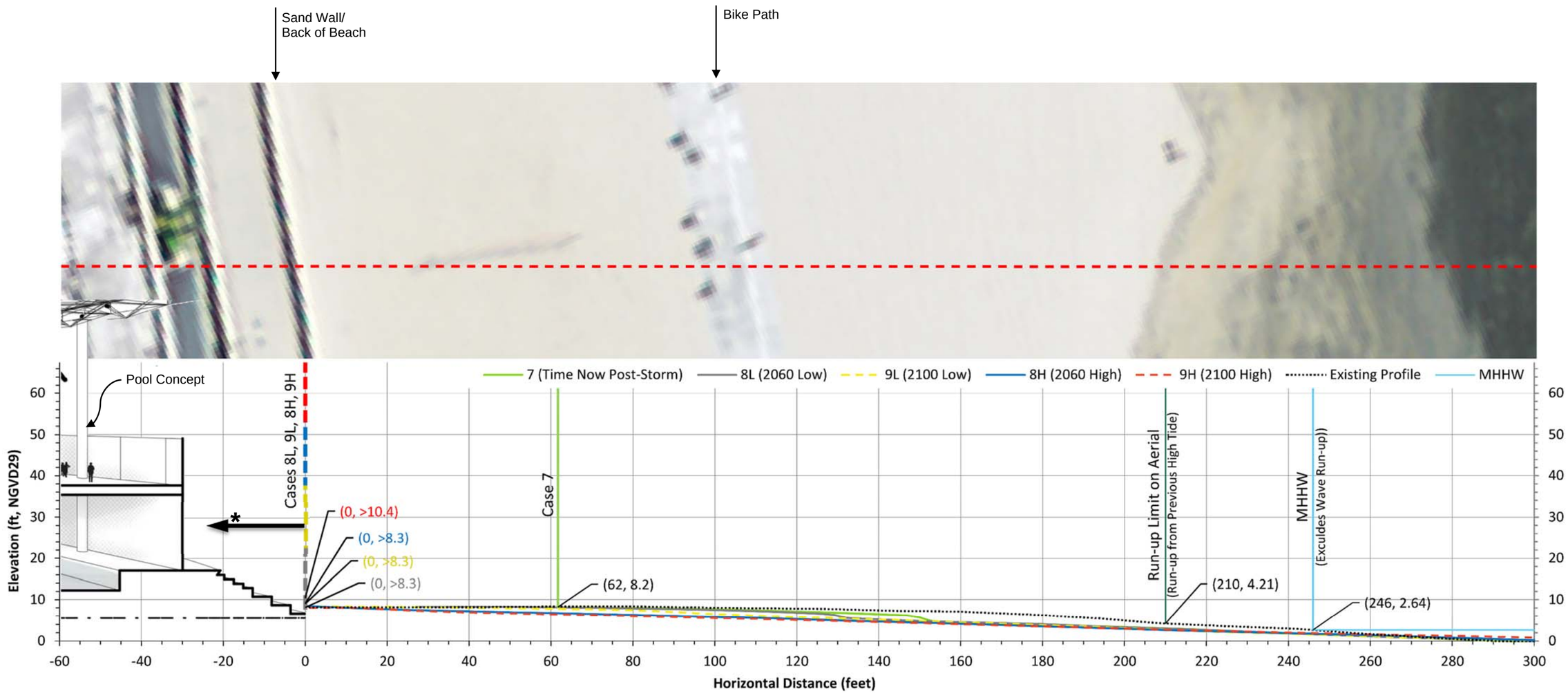
The wave run-up limit of this case is landward of this location. The exact landward extent cannot be determined due to the presence of the existing infrastructure; i.e. the profile modeling ends at the landward edge of sandy beach.

Figure 17: Post Storm Profiles and 2% Run-up Limits - Existing Breakwater Configuration



✱ *The wave run-up limit of this case is landward of this location. The exact landward extent cannot be determined due to the presence of the existing infrastructure; i.e. the profile modeling ends at the landward edge of sandy beach.*

Figure 18: Post Storm Profiles and 2% Run-up Limits - Alternative BW2 Configuration



* *The wave run-up limits of these cases are <u>landward</u> of this location. The exact landward extents cannot be determined due to the presence of the existing infrastructure; i.e. the profile modeling ends at the landward edge of sandy beach.*

Figure 19: Post Storm Profiles and 2% Run-up Limits - Alternative BW3 Configuration

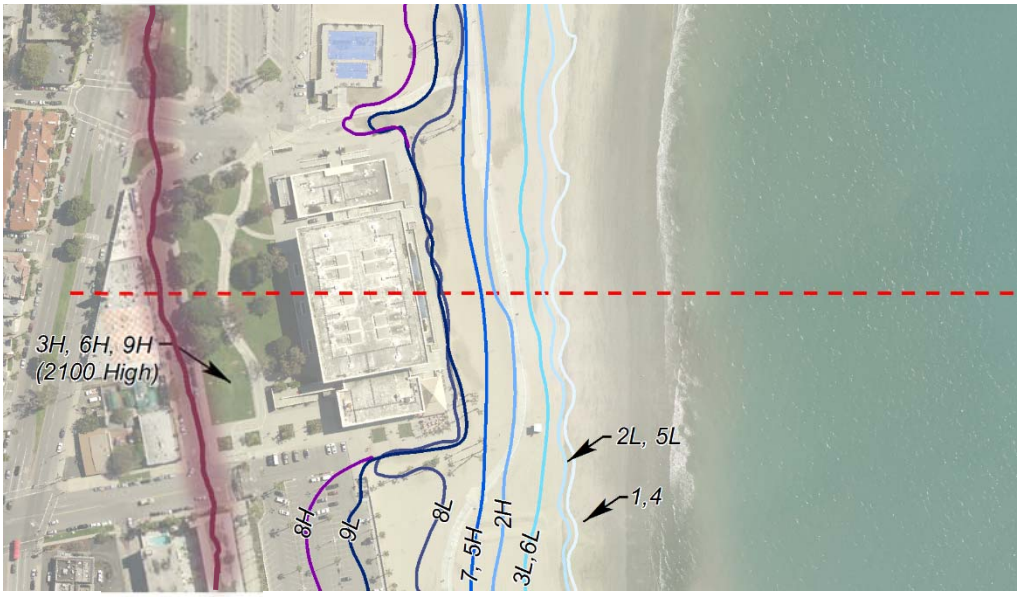


Figure 20: Approximate Wave Runup Limits near the Belmont Pool

(Note: The limit locations along the dashed red profile line are representative of the XBEACH model results; however the limit lines elsewhere on the plan view were manually approximated from the NOAA TopoBathy dataset.)

5.0 CONCLUSIONS AND RECOMMENDATIONS

At present day sea levels and no modifications to the existing Long Beach Breakwater, the XBeach model predicts that the pool facility would suffer no damage or inundation from the 100-year return period storm waves. The beach fronting the facility was predicted to form a two-foot high scarp near the berm crest with 25 feet of berm erosion. The modeled 2% wave run-up reached 5.2ft NGVD29. The landward extent of run-up was reduced by the beach scarp, however even without the scarp, the 2% run-up is unlikely to reach the back beach.

Over the range of predicted 2060 sea levels and no modifications to the Breakwater, the modeled 100-year storm eroded 18% to 48% of the beach berm. Wave run-up for the low estimate of 2060 SLR (+0.5ft) reaches the 5.9ft NGVD29 beach contour, while the high 2060 SLR estimate (+2.6 ft) reaches the 8.2 ft NGVD29 beach contour. In comparison, the existing elevation of the back beach at the sand wall along the modeled profile is at 8.3ft, but is as low as 7 feet near the stairs to the west and closer to 9 feet near the stairs to the east. **These results suggest that the pool is unlikely to suffer damage with the existing breakwater and 2060 levels of sea level rise.**

Sea level rise estimates for 2100 cover a wide range from +1.4 feet to +5.5 feet. The low 2100 SLR estimate ran with the 100-year storm and existing breakwater erodes 60 feet (30%) of the beach berm, with wave run-up reaching the 6.6 ft NGVD29 beach contour. Contrastingly, without preventative measures, the upper 2100 estimate would not only inundate much of the pool facility, but much of the Long Beach Peninsula and Belmont Shore as well. **With the exception of the high 2100 SLR scenario, the effects of the 100-year storm and SLR are quite manageable with the existing breakwater in place.**

Removing the western 1/3 of the Long Beach Breakwater (Breakwater Alternative 2) does not create significantly more erosion or inundation at the site following the modeled 100-year storm, in comparison

to the existing Breakwater scenarios. The analysis results of the BW2 scenarios are not significantly different from those of the existing breakwater scenarios; **with the exception of the high 2100 SLR scenario, the effects of the 100-year storm and SLR are quite manageable with the implementation of the Breakwater Alternative 2 (removal of the western 1/3 of the Breakwater).**

Breakwater Alternative 3, removal of the eastern 2/3 of the existing breakwater, would lead to a significant increase in erosion and wave run-up. At current sea levels, the storm waves would inundate up to the 8.2ft NGVD29 elevation and erode approximately 40 feet of beach width. At the conservative (high) 2060 and 2100 predicted sea levels (+2.6ft, +5.5ft), the existing 195-foot wide berm is eroded to just 24 feet and completely eroded, respectively. **The wave run-up reaches above the sand wall in all BW3 scenarios with the exception of case 7 (current mean sea level).** Lastly, note that **any modifications to the Long Beach Breakwater would include measures to mitigate the effects of the increased wave activity at the shoreline it previously protected.**

Erosion caused by the 100-yr storm at the site is likely to be permanent and poses a more serious threat to the pool structure than wave run-up alone. In addition, this predicted erosion may be exacerbated by smaller erosional events (5-yr, 10-yr, 25-yr storms…etc). The west end of the property is especially vulnerable as it is 40 to 50 feet closer to the shoreline than the beach front where the modeled profile is located. However, the majority of the erosion occurs over a long period of time and **additional measures, such as nourishment, winter sand dikes, or protective coastal structures, can be employed to counter act the erosion and safeguard the facility.** Furthermore, modifications to the Long Beach Breakwater would include measures to mitigate the impacts of increased wave activity.

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