
APPENDIX A

CALEEMOD OUTPUT SHEETS

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3000 - 3500 Marina Boulevard
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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	422.55	1000sqft	7.00	422,552.00	0
Enclosed Parking Structure	654.00	Space	1.00	261,600.00	0
Parking Lot	127.00	Space	0.87	50,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	328.8	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - CO2 intensity based on 5-year average (2016-2020), PG&E 2015

Land Use - Total lot size is 8.87 acres

Construction Phase - Default construction duration and phasing

Grading - Grading of the project site would remove approximately 24,300 cubic yards of soil to be removed from the site

Trips and VMT - Grading of the project site would remove approximately 24,300 cubic yards of soil to be removed from the site, which would require approximately 2,025 truck trips based on a typical truckload volume of 12 cubic yards per load.

Vehicle Trips - Trip rates based on 3000-3500 Marina Boulevard Site Plan Review prepared by Hexagon Transportation Consultants, Inc., August 24, 2018

Mobile Land Use Mitigation -

Energy Mitigation - Project would be LEED Gold certified

Water Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblGrading	MaterialExported	0.00	24,300.00
tblLandUse	LotAcreage	9.70	7.00
tblLandUse	LotAcreage	5.89	1.00
tblLandUse	LotAcreage	1.14	0.87
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblTripsAndVMT	HaulingTripNumber	2,403.00	2,025.00
tblVehicleTrips	ST_TR	1.90	11.26
tblVehicleTrips	SU_TR	1.11	11.26
tblVehicleTrips	WD_TR	8.11	11.26

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.4961	5.0157	3.5004	0.0101	0.4750	0.1909	0.6659	0.1703	0.1790	0.3492	0.0000	926.9765	926.9765	0.1104	0.0000	929.7355
2020	2.3277	0.5462	0.4905	1.2300e-003	0.0386	0.0225	0.0611	0.0105	0.0210	0.0315	0.0000	111.2321	111.2321	0.0157	0.0000	111.6237
Maximum	2.3277	5.0157	3.5004	0.0101	0.4750	0.1909	0.6659	0.1703	0.1790	0.3492	0.0000	926.9765	926.9765	0.1104	0.0000	929.7355

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.4961	5.0157	3.5004	0.0101	0.4750	0.1909	0.6659	0.1703	0.1790	0.3492	0.0000	926.9761	926.9761	0.1104	0.0000	929.7351
2020	2.3277	0.5462	0.4905	1.2300e-003	0.0386	0.0225	0.0611	0.0105	0.0210	0.0315	0.0000	111.2320	111.2320	0.0157	0.0000	111.6236
Maximum	2.3277	5.0157	3.5004	0.0101	0.4750	0.1909	0.6659	0.1703	0.1790	0.3492	0.0000	926.9761	926.9761	0.1104	0.0000	929.7351

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

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	1.5758	1.5758
2	4-7-2019	7-6-2019	1.3204	1.3204
3	7-7-2019	10-6-2019	1.3359	1.3359
4	10-7-2019	1-6-2020	1.3412	1.3412
5	1-7-2020	4-6-2020	2.7803	2.7803
		Highest	2.7803	2.7803

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	1.8984	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0215	0.0215	6.0000e-005	0.0000	0.0230
Energy	0.0564	0.5127	0.4306	3.0800e-003		0.0390	0.0390		0.0390	0.0390	0.0000	1,258.3865	1,258.3865	0.0725	0.0230	1,267.0552
Mobile	1.4262	6.9547	16.5702	0.0540	4.4387	0.0602	4.4989	1.1916	0.0566	1.2482	0.0000	4,948.8357	4,948.8357	0.1918	0.0000	4,953.6311
Waste						0.0000	0.0000		0.0000	0.0000	6.5180	0.0000	6.5180	0.3852	0.0000	16.1482
Water						0.0000	0.0000		0.0000	0.0000	65.9143	167.6672	233.5815	6.7848	0.1629	451.7507
Total	3.3810	7.4674	17.0119	0.0571	4.4387	0.0992	4.5379	1.1916	0.0956	1.2872	72.4324	6,374.9109	6,447.3432	7.4344	0.1859	6,688.6081

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7750	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0215	0.0215	6.0000e-005	0.0000	0.0230
Energy	0.0523	0.4757	0.3996	2.8500e-003		0.0362	0.0362		0.0362	0.0362	0.0000	1,188.0328	1,188.0328	0.0690	0.0217	1,196.2323
Mobile	1.3726	6.5430	15.3514	0.0490	3.9949	0.0547	4.0496	1.0724	0.0515	1.1239	0.0000	4,486.4564	4,486.4564	0.1781	0.0000	4,490.9094
Waste						0.0000	0.0000		0.0000	0.0000	6.5180	0.0000	6.5180	0.3852	0.0000	16.1482
Water						0.0000	0.0000		0.0000	0.0000	52.7315	134.1337	186.8652	5.4279	0.1303	361.4006
Total	3.1999	7.0188	15.7621	0.0518	3.9949	0.0909	4.0858	1.0724	0.0877	1.1601	59.2495	5,808.6445	5,867.8940	6.0603	0.1521	6,064.7134

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	5.36	6.01	7.35	9.25	10.00	8.33	9.96	10.00	8.32	9.87	18.20	8.88	8.99	18.48	18.22	9.33

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/7/2019	2/1/2019	5	20	
2	Site Preparation	Site Preparation	2/2/2019	2/15/2019	5	10	
3	Grading	Grading	2/16/2019	3/15/2019	5	20	
4	Building Construction	Building Construction	3/16/2019	1/31/2020	5	230	
5	Paving	Paving	2/1/2020	2/28/2020	5	20	
6	Architectural Coating	Architectural Coating	2/29/2020	3/27/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 633,828; Non-Residential Outdoor: 211,276; Striped Parking Area: 18,744 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,025.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	266.00	120.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	53.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.0000e-004	4.1100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0722	1.0722	3.0000e-005	0.0000	1.0729
Total	5.4000e-004	4.0000e-004	4.1100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0722	1.0722	3.0000e-005	0.0000	1.0729

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	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.0000e-004	4.1100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0722	1.0722	3.0000e-005	0.0000	1.0729
Total	5.4000e-004	4.0000e-004	4.1100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0722	1.0722	3.0000e-005	0.0000	1.0729

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e-004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195

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3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.4000e-004	2.4600e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6433	0.6433	2.0000e-005	0.0000	0.6437
Total	3.3000e-004	2.4000e-004	2.4600e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6433	0.6433	2.0000e-005	0.0000	0.6437

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e-004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195

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3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.4000e-004	2.4600e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6433	0.6433	2.0000e-005	0.0000	0.6437
Total	3.3000e-004	2.4000e-004	2.4600e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6433	0.6433	2.0000e-005	0.0000	0.6437

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530
Total	0.0258	0.2835	0.1629	3.0000e-004	0.0655	0.0140	0.0795	0.0337	0.0129	0.0465	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530

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3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.2400e-003	0.3170	0.0619	8.1000e-004	0.0171	1.2100e-003	0.0183	4.7000e-003	1.1600e-003	5.8600e-003	0.0000	78.4221	78.4221	4.1300e-003	0.0000	78.5254
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	4.0000e-004	4.1100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0722	1.0722	3.0000e-005	0.0000	1.0729
Total	9.7800e-003	0.3174	0.0660	8.2000e-004	0.0183	1.2200e-003	0.0195	5.0200e-003	1.1700e-003	6.1800e-003	0.0000	79.4942	79.4942	4.1600e-003	0.0000	79.5983

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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6422	26.6422	8.4300e-003	0.0000	26.8530
Total	0.0258	0.2835	0.1629	3.0000e-004	0.0655	0.0140	0.0795	0.0337	0.0129	0.0465	0.0000	26.6422	26.6422	8.4300e-003	0.0000	26.8530

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3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.2400e-003	0.3170	0.0619	8.1000e-004	0.0171	1.2100e-003	0.0183	4.7000e-003	1.1600e-003	5.8600e-003	0.0000	78.4221	78.4221	4.1300e-003	0.0000	78.5254
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	4.0000e-004	4.1100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0722	1.0722	3.0000e-005	0.0000	1.0729
Total	9.7800e-003	0.3174	0.0660	8.2000e-004	0.0183	1.2200e-003	0.0195	5.0200e-003	1.1700e-003	6.1800e-003	0.0000	79.4942	79.4942	4.1600e-003	0.0000	79.5983

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2444	2.1817	1.7765	2.7900e-003		0.1335	0.1335		0.1255	0.1255	0.0000	243.3328	243.3328	0.0593	0.0000	244.8148
Total	0.2444	2.1817	1.7765	2.7900e-003		0.1335	0.1335		0.1255	0.1255	0.0000	243.3328	243.3328	0.0593	0.0000	244.8148

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3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0587	1.5728	0.4035	3.4100e-003	0.0814	0.0108	0.0923	0.0236	0.0103	0.0339	0.0000	327.2976	327.2976	0.0181	0.0000	327.7510
Worker	0.0998	0.0739	0.7540	2.1800e-003	0.2175	1.5000e-003	0.2190	0.0579	1.3800e-003	0.0593	0.0000	196.7835	196.7835	5.2700e-003	0.0000	196.9153
Total	0.1585	1.6468	1.1575	5.5900e-003	0.2990	0.0123	0.3113	0.0814	0.0117	0.0931	0.0000	524.0811	524.0811	0.0234	0.0000	524.6662

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	0.2444	2.1817	1.7765	2.7900e-003		0.1335	0.1335		0.1255	0.1255	0.0000	243.3326	243.3326	0.0593	0.0000	244.8145
Total	0.2444	2.1817	1.7765	2.7900e-003		0.1335	0.1335		0.1255	0.1255	0.0000	243.3326	243.3326	0.0593	0.0000	244.8145

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3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0587	1.5728	0.4035	3.4100e-003	0.0814	0.0108	0.0923	0.0236	0.0103	0.0339	0.0000	327.2976	327.2976	0.0181	0.0000	327.7510
Worker	0.0998	0.0739	0.7540	2.1800e-003	0.2175	1.5000e-003	0.2190	0.0579	1.3800e-003	0.0593	0.0000	196.7835	196.7835	5.2700e-003	0.0000	196.9153
Total	0.1585	1.6468	1.1575	5.5900e-003	0.2990	0.0123	0.3113	0.0814	0.0117	0.0931	0.0000	524.0811	524.0811	0.0234	0.0000	524.6662

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6352	26.6352	6.5000e-003	0.0000	26.7976
Total	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6352	26.6352	6.5000e-003	0.0000	26.7976

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3.5 Building Construction - 2020

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	5.3400e-003	0.1592	0.0400	3.8000e-004	9.0500e-003	7.8000e-004	9.8300e-003	2.6200e-003	7.4000e-004	3.3600e-003	0.0000	36.1311	36.1311	1.8600e-003	0.0000	36.1777
Worker	0.0101	7.2500e-003	0.0751	2.3000e-004	0.0242	1.6000e-004	0.0243	6.4300e-003	1.5000e-004	6.5800e-003	0.0000	21.1769	21.1769	5.1000e-004	0.0000	21.1897
Total	0.0155	0.1665	0.1152	6.1000e-004	0.0332	9.4000e-004	0.0342	9.0500e-003	8.9000e-004	9.9400e-003	0.0000	57.3079	57.3079	2.3700e-003	0.0000	57.3674

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	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6351	26.6351	6.5000e-003	0.0000	26.7976
Total	0.0244	0.2206	0.1938	3.1000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	26.6351	26.6351	6.5000e-003	0.0000	26.7976

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3.5 Building Construction - 2020

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	5.3400e-003	0.1592	0.0400	3.8000e-004	9.0500e-003	7.8000e-004	9.8300e-003	2.6200e-003	7.4000e-004	3.3600e-003	0.0000	36.1311	36.1311	1.8600e-003	0.0000	36.1777
Worker	0.0101	7.2500e-003	0.0751	2.3000e-004	0.0242	1.6000e-004	0.0243	6.4300e-003	1.5000e-004	6.5800e-003	0.0000	21.1769	21.1769	5.1000e-004	0.0000	21.1897
Total	0.0155	0.1665	0.1152	6.1000e-004	0.0332	9.4000e-004	0.0342	9.0500e-003	8.9000e-004	9.9400e-003	0.0000	57.3079	57.3079	2.3700e-003	0.0000	57.3674

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	1.1400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0147	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902

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3.6 Paving - 2020

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	5.0000e-004	3.6000e-004	3.6800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0384	1.0384	3.0000e-005	0.0000	1.0391
Total	5.0000e-004	3.6000e-004	3.6800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0384	1.0384	3.0000e-005	0.0000	1.0391

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	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	1.1400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0147	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901

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3.6 Paving - 2020

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	5.0000e-004	3.6000e-004	3.6800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0384	1.0384	3.0000e-005	0.0000	1.0391
Total	5.0000e-004	3.6000e-004	3.6800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0384	1.0384	3.0000e-005	0.0000	1.0391

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2685					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	2.2709	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582

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3.7 Architectural Coating - 2020

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	1.7600e-003	1.2600e-003	0.0130	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6691	3.6691	9.0000e-005	0.0000	3.6713
Total	1.7600e-003	1.2600e-003	0.0130	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6691	3.6691	9.0000e-005	0.0000	3.6713

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	2.2685					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	2.2709	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582

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3.7 Architectural Coating - 2020

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	1.7600e-003	1.2600e-003	0.0130	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6691	3.6691	9.0000e-005	0.0000	3.6713
Total	1.7600e-003	1.2600e-003	0.0130	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6691	3.6691	9.0000e-005	0.0000	3.6713

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.3726	6.5430	15.3514	0.0490	3.9949	0.0547	4.0496	1.0724	0.0515	1.1239	0.0000	4,486.4564	4,486.4564	0.1781	0.0000	4,490.9094
Unmitigated	1.4262	6.9547	16.5702	0.0540	4.4387	0.0602	4.4989	1.1916	0.0566	1.2482	0.0000	4,948.8357	4,948.8357	0.1918	0.0000	4,953.6311

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Research & Development	4,757.94	4,757.94	4,757.94	11,924,563	10,732,107
Total	4,757.94	4,757.94	4,757.94	11,924,563	10,732,107

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Parking Lot	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Research & Development	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	670.1954	670.1954	0.0591	0.0122	675.3177
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	700.2991	700.2991	0.0618	0.0128	705.6515
NaturalGas Mitigated	0.0523	0.4757	0.3996	2.8500e-003		0.0362	0.0362		0.0362	0.0362	0.0000	517.8374	517.8374	9.9300e-003	9.4900e-003	520.9147
NaturalGas Unmitigated	0.0564	0.5127	0.4306	3.0800e-003		0.0390	0.0390		0.0390	0.0390	0.0000	558.0874	558.0874	0.0107	0.0102	561.4038

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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					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	1.04582e+007	0.0564	0.5127	0.4306	3.0800e-003		0.0390	0.0390		0.0390	0.0390	0.0000	558.0874	558.0874	0.0107	0.0102	561.4038
Total		0.0564	0.5127	0.4306	3.0800e-003		0.0390	0.0390		0.0390	0.0390	0.0000	558.0874	558.0874	0.0107	0.0102	561.4038

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					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	9.70391e+006	0.0523	0.4757	0.3996	2.8500e-003		0.0362	0.0362		0.0362	0.0362	0.0000	517.8374	517.8374	9.9300e-003	9.4900e-003	520.9147
Total		0.0523	0.4757	0.3996	2.8500e-003		0.0362	0.0362		0.0362	0.0362	0.0000	517.8374	517.8374	9.9300e-003	9.4900e-003	520.9147

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking Structure	1.48327e+006	221.2169	0.0195	4.0400e-003	222.9077
Parking Lot	17780	2.6517	2.3000e-004	5.0000e-005	2.6720
Research & Development	3.19449e+006	476.4305	0.0420	8.6900e-003	480.0718
Total		700.2991	0.0618	0.0128	705.6515

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking Structure	1.38072e+006	205.9229	0.0182	3.7600e-003	207.4968
Parking Lot	17780	2.6517	2.3000e-004	5.0000e-005	2.6720
Research & Development	3.09519e+006	461.6208	0.0407	8.4200e-003	465.1489
Total		670.1954	0.0591	0.0122	675.3177

6.0 Area Detail

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6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7750	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0215	0.0215	6.0000e-005	0.0000	0.0230
Unmitigated	1.8984	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0215	0.0215	6.0000e-005	0.0000	0.0230

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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	0.2269					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6705					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0215	0.0215	6.0000e-005	0.0000	0.0230
Total	1.8984	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0215	0.0215	6.0000e-005	0.0000	0.0230

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	0.2269					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5471					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0215	0.0215	6.0000e-005	0.0000	0.0230
Total	1.7750	1.0000e-004	0.0111	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0215	0.0215	6.0000e-005	0.0000	0.0230

7.0 Water Detail

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7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	186.8652	5.4279	0.1303	361.4006
Unmitigated	233.5815	6.7848	0.1629	451.7507

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	207.765 / 0	233.5815	6.7848	0.1629	451.7507
Total		233.5815	6.7848	0.1629	451.7507

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	166.212 / 0	186.8652	5.4279	0.1303	361.4006
Total		186.8652	5.4279	0.1303	361.4006

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8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.5180	0.3852	0.0000	16.1482
Unmitigated	6.5180	0.3852	0.0000	16.1482

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	32.11	6.5180	0.3852	0.0000	16.1482
Total		6.5180	0.3852	0.0000	16.1482

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	32.11	6.5180	0.3852	0.0000	16.1482
Total		6.5180	0.3852	0.0000	16.1482

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	422.55	1000sqft	7.00	422,552.00	0
Enclosed Parking Structure	654.00	Space	1.00	261,600.00	0
Parking Lot	127.00	Space	0.87	50,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	328.8	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - CO2 intensity based on 5-year average (2016-2020), PG&E 2015

Land Use - Total lot size is 8.87 acres

Construction Phase - Default construction duration and phasing

Grading - Grading of the project site would remove approximately 24,300 cubic yards of soil to be removed from the site

Trips and VMT - Grading of the project site would remove approximately 24,300 cubic yards of soil to be removed from the site, which would require approximately 2,025 truck trips based on a typical truckload volume of 12 cubic yards per load.

Vehicle Trips - Trip rates based on 3000-3500 Marina Boulevard Site Plan Review prepared by Hexagon Transportation Consultants, Inc., August 24, 2018

Mobile Land Use Mitigation -

Energy Mitigation - Project would be LEED Gold certified

Water Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblGrading	MaterialExported	0.00	24,300.00
tblLandUse	LotAcreage	9.70	7.00
tblLandUse	LotAcreage	5.89	1.00
tblLandUse	LotAcreage	1.14	0.87
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblTripsAndVMT	HaulingTripNumber	2,403.00	2,025.00
tblVehicleTrips	ST_TR	1.90	11.26
tblVehicleTrips	SU_TR	1.11	11.26
tblVehicleTrips	WD_TR	8.11	11.26

2.0 Emissions Summary

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4035	59.4304	28.7551	0.1124	18.2141	2.3913	20.6055	9.9699	2.2000	12.1699	0.0000	11,768.56 41	11,768.56 41	1.3778	0.0000	11,803.00 82
2020	227.2767	33.4213	27.2475	0.0819	2.9974	1.1982	4.1956	0.8134	1.1275	1.9409	0.0000	8,236.825 3	8,236.825 3	0.8479	0.0000	8,258.021 5
Maximum	227.2767	59.4304	28.7551	0.1124	18.2141	2.3913	20.6055	9.9699	2.2000	12.1699	0.0000	11,768.56 41	11,768.56 41	1.3778	0.0000	11,803.00 82

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4035	59.4304	28.7551	0.1124	18.2141	2.3913	20.6055	9.9699	2.2000	12.1699	0.0000	11,768.56 41	11,768.56 41	1.3778	0.0000	11,803.00 82
2020	227.2767	33.4213	27.2475	0.0819	2.9974	1.1982	4.1956	0.8134	1.1275	1.9409	0.0000	8,236.825 3	8,236.825 3	0.8479	0.0000	8,258.021 5
Maximum	227.2767	59.4304	28.7551	0.1124	18.2141	2.3913	20.6055	9.9699	2.2000	12.1699	0.0000	11,768.56 41	11,768.56 41	1.3778	0.0000	11,803.00 82

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

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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	10.4079	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811
Energy	0.3090	2.8091	2.3596	0.0169		0.2135	0.2135		0.2135	0.2135		3,370.8822	3,370.8822	0.0646	0.0618	3,390.9137
Mobile	8.9127	36.8987	94.7230	0.3144	25.3379	0.3302	25.6680	6.7802	0.3106	7.0907		31,748.2141	31,748.2141	1.1724		31,777.5250
Total	19.6296	39.7090	97.2063	0.3313	25.3379	0.5441	25.8820	6.7802	0.5245	7.3047		35,119.3597	35,119.3597	1.2378	0.0618	35,168.7197

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	9.7318	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811
Energy	0.2867	2.6065	2.1894	0.0156		0.1981	0.1981		0.1981	0.1981		3,127.7701	3,127.7701	0.0600	0.0573	3,146.3569
Mobile	8.6112	34.7688	87.1771	0.2850	22.8041	0.3001	23.1042	6.1021	0.2823	6.3844		28,777.7412	28,777.7412	1.0852		28,804.8713
Total	18.6298	37.3764	89.4902	0.3006	22.8041	0.4987	23.3028	6.1021	0.4808	6.5830		31,905.7747	31,905.7747	1.1459	0.0573	31,951.5092

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	5.09	5.87	7.94	9.25	10.00	8.35	9.97	10.00	8.33	9.88	0.00	9.15	9.15	7.42	7.22	9.15

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	1/7/2019	2/1/2019	5	20	
2	Site Preparation	Site Preparation	2/2/2019	2/15/2019	5	10	
3	Grading	Grading	2/16/2019	3/15/2019	5	20	
4	Building Construction	Building Construction	3/16/2019	1/31/2020	5	230	
5	Paving	Paving	2/1/2020	2/28/2020	5	20	
6	Architectural Coating	Architectural Coating	2/29/2020	3/27/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 633,828; Non-Residential Outdoor: 211,276; Striped Parking Area: 18,744 (Architectural Coating – sqft)

OffRoad Equipment

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,025.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	266.00	120.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	53.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0357	0.4473	1.2800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		127.1127	127.1127	3.3800e-003		127.1972
Total	0.0570	0.0357	0.4473	1.2800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		127.1127	127.1127	3.3800e-003		127.1972

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	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0357	0.4473	1.2800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		127.1127	127.1127	3.3800e-003		127.1972
Total	0.0570	0.0357	0.4473	1.2800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		127.1127	127.1127	3.3800e-003		127.1972

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

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3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0429	0.5367	1.5300e-003	0.1479	9.8000e-004	0.1488	0.0392	9.0000e-004	0.0401		152.5352	152.5352	4.0600e-003		152.6366
Total	0.0685	0.0429	0.5367	1.5300e-003	0.1479	9.8000e-004	0.1488	0.0392	9.0000e-004	0.0401		152.5352	152.5352	4.0600e-003		152.6366

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

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3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0429	0.5367	1.5300e-003	0.1479	9.8000e-004	0.1488	0.0392	9.0000e-004	0.0401		152.5352	152.5352	4.0600e-003		152.6366
Total	0.0685	0.0429	0.5367	1.5300e-003	0.1479	9.8000e-004	0.1488	0.0392	9.0000e-004	0.0401		152.5352	152.5352	4.0600e-003		152.6366

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	6.5523	1.3974	7.9497	3.3675	1.2856	4.6531		2,936.8068	2,936.8068	0.9292		2,960.0361

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3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9133	31.0467	5.9858	0.0815	1.7688	0.1197	1.8885	0.4847	0.1146	0.5993		8,704.6446	8,704.6446	0.4452		8,715.7749
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	0.0570	0.0357	0.4473	1.2800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		127.1127	127.1127	3.3800e-003		127.1972
Total	0.9704	31.0824	6.4331	0.0828	1.8920	0.1206	2.0125	0.5174	0.1153	0.6327		8,831.7573	8,831.7573	0.4486		8,842.9721

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	6.5523	1.3974	7.9497	3.3675	1.2856	4.6531	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Summer

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9133	31.0467	5.9858	0.0815	1.7688	0.1197	1.8885	0.4847	0.1146	0.5993		8,704.6446	8,704.6446	0.4452		8,715.7749
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	0.0570	0.0357	0.4473	1.2800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		127.1127	127.1127	3.3800e-003		127.1972
Total	0.9704	31.0824	6.4331	0.0828	1.8920	0.1206	2.0125	0.5174	0.1153	0.6327		8,831.7573	8,831.7573	0.4486		8,842.9721

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

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3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5565	14.9872	3.6596	0.0333	0.8123	0.1037	0.9159	0.2338	0.0992	0.3330		3,522.6609	3,522.6609	0.1863		3,527.3177
Worker	1.0116	0.6336	7.9317	0.0226	2.1851	0.0145	2.1996	0.5796	0.0133	0.5929		2,254.1314	2,254.1314	0.0599		2,255.6296
Total	1.5680	15.6207	11.5913	0.0559	2.9974	0.1182	3.1155	0.8134	0.1125	0.9259		5,776.7923	5,776.7923	0.2462		5,782.9474

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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

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3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5565	14.9872	3.6596	0.0333	0.8123	0.1037	0.9159	0.2338	0.0992	0.3330		3,522.6609	3,522.6609	0.1863		3,527.3177
Worker	1.0116	0.6336	7.9317	0.0226	2.1851	0.0145	2.1996	0.5796	0.0133	0.5929		2,254.1314	2,254.1314	0.0599		2,255.6296
Total	1.5680	15.6207	11.5913	0.0559	2.9974	0.1182	3.1155	0.8134	0.1125	0.9259		5,776.7923	5,776.7923	0.2462		5,782.9474

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

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3.5 Building Construction - 2020

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	0.4549	13.6755	3.2621	0.0331	0.8123	0.0670	0.8793	0.2338	0.0641	0.2980		3,500.4966	3,500.4966	0.1724		3,504.8062
Worker	0.9246	0.5597	7.1369	0.0219	2.1851	0.0142	2.1993	0.5796	0.0130	0.5926		2,183.2656	2,183.2656	0.0526		2,184.5809
Total	1.3795	14.2352	10.3990	0.0550	2.9974	0.0812	3.0786	0.8134	0.0772	0.8906		5,683.7622	5,683.7622	0.2250		5,689.3870

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

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3.5 Building Construction - 2020

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	0.4549	13.6755	3.2621	0.0331	0.8123	0.0670	0.8793	0.2338	0.0641	0.2980		3,500.4966	3,500.4966	0.1724		3,504.8062
Worker	0.9246	0.5597	7.1369	0.0219	2.1851	0.0142	2.1993	0.5796	0.0130	0.5926		2,183.2656	2,183.2656	0.0526		2,184.5809
Total	1.3795	14.2352	10.3990	0.0550	2.9974	0.0812	3.0786	0.8134	0.0772	0.8906		5,683.7622	5,683.7622	0.2250		5,689.3870

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.1140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4705	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

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3.6 Paving - 2020

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	0.0521	0.0316	0.4025	1.2400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		123.1165	123.1165	2.9700e-003		123.1907
Total	0.0521	0.0316	0.4025	1.2400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		123.1165	123.1165	2.9700e-003		123.1907

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.1140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4705	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

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3.6 Paving - 2020

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	0.0521	0.0316	0.4025	1.2400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		123.1165	123.1165	2.9700e-003		123.1907
Total	0.0521	0.0316	0.4025	1.2400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		123.1165	123.1165	2.9700e-003		123.1907

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	226.8503					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	227.0925	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020

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	0.1842	0.1115	1.4220	4.3600e-003	0.4354	2.8200e-003	0.4382	0.1155	2.6000e-003	0.1181		435.0116	435.0116	0.0105		435.2736
Total	0.1842	0.1115	1.4220	4.3600e-003	0.4354	2.8200e-003	0.4382	0.1155	2.6000e-003	0.1181		435.0116	435.0116	0.0105		435.2736

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	226.8503					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	227.0925	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020

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	0.1842	0.1115	1.4220	4.3600e-003	0.4354	2.8200e-003	0.4382	0.1155	2.6000e-003	0.1181		435.0116	435.0116	0.0105		435.2736
Total	0.1842	0.1115	1.4220	4.3600e-003	0.4354	2.8200e-003	0.4382	0.1155	2.6000e-003	0.1181		435.0116	435.0116	0.0105		435.2736

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	8.6112	34.7688	87.1771	0.2850	22.8041	0.3001	23.1042	6.1021	0.2823	6.3844		28,777.74 12	28,777.74 12	1.0852		28,804.87 13
Unmitigated	8.9127	36.8987	94.7230	0.3144	25.3379	0.3302	25.6680	6.7802	0.3106	7.0907		31,748.21 41	31,748.21 41	1.1724		31,777.52 50

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Research & Development	4,757.94	4,757.94	4,757.94	11,924,563	10,732,107
Total	4,757.94	4,757.94	4,757.94	11,924,563	10,732,107

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Parking Lot	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Research & Development	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2867	2.6065	2.1894	0.0156		0.1981	0.1981		0.1981	0.1981		3,127.770 1	3,127.770 1	0.0600	0.0573	3,146.356 9
NaturalGas Unmitigated	0.3090	2.8091	2.3596	0.0169		0.2135	0.2135		0.2135	0.2135		3,370.882 2	3,370.882 2	0.0646	0.0618	3,390.913 7

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	28652.5	0.3090	2.8091	2.3596	0.0169		0.2135	0.2135		0.2135	0.2135		3,370.8822	3,370.8822	0.0646	0.0618	3,390.9137
Total		0.3090	2.8091	2.3596	0.0169		0.2135	0.2135		0.2135	0.2135		3,370.8822	3,370.8822	0.0646	0.0618	3,390.9137

Mitigated

	Natural Gas 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					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	26.586	0.2867	2.6065	2.1894	0.0156		0.1981	0.1981		0.1981	0.1981		3,127.7701	3,127.7701	0.0600	0.0573	3,146.3569
Total		0.2867	2.6065	2.1894	0.0156		0.1981	0.1981		0.1981	0.1981		3,127.7701	3,127.7701	0.0600	0.0573	3,146.3569

6.0 Area Detail

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Summer

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.7318	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811
Unmitigated	10.4079	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811

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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	1.2430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.1533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0116	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811
Total	10.4079	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811

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	1.2430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.4772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0116	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811
Total	9.7318	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811

7.0 Water Detail

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Summer

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Winter

3000 - 3500 Marina Boulevard
Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	422.55	1000sqft	7.00	422,552.00	0
Enclosed Parking Structure	654.00	Space	1.00	261,600.00	0
Parking Lot	127.00	Space	0.87	50,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	328.8	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Winter

Project Characteristics - CO2 intensity based on 5-year average (2016-2020), PG&E 2015

Land Use - Total lot size is 8.87 acres

Construction Phase - Default construction duration and phasing

Grading - Grading of the project site would remove approximately 24,300 cubic yards of soil to be removed from the site

Trips and VMT - Grading of the project site would remove approximately 24,300 cubic yards of soil to be removed from the site, which would require approximately 2,025 truck trips based on a typical truckload volume of 12 cubic yards per load.

Vehicle Trips - Trip rates based on 3000-3500 Marina Boulevard Site Plan Review prepared by Hexagon Transportation Consultants, Inc., August 24, 2018

Mobile Land Use Mitigation -

Energy Mitigation - Project would be LEED Gold certified

Water Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblGrading	MaterialExported	0.00	24,300.00
tblLandUse	LotAcreage	9.70	7.00
tblLandUse	LotAcreage	5.89	1.00
tblLandUse	LotAcreage	1.14	0.87
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblTripsAndVMT	HaulingTripNumber	2,403.00	2,025.00
tblVehicleTrips	ST_TR	1.90	11.26
tblVehicleTrips	SU_TR	1.11	11.26
tblVehicleTrips	WD_TR	8.11	11.26

2.0 Emissions Summary

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4074	60.2252	28.8306	0.1110	18.2141	2.3913	20.6055	9.9699	2.2000	12.1699	0.0000	11,615.4691	11,615.4691	1.4015	0.0000	11,650.5056
2020	227.2874	33.7061	27.2833	0.0793	2.9974	1.1994	4.1968	0.8134	1.1286	1.9420	0.0000	7,976.1239	7,976.1239	0.8585	0.0000	7,997.5865
Maximum	227.2874	60.2252	28.8306	0.1110	18.2141	2.3913	20.6055	9.9699	2.2000	12.1699	0.0000	11,615.4691	11,615.4691	1.4015	0.0000	11,650.5056

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4074	60.2252	28.8306	0.1110	18.2141	2.3913	20.6055	9.9699	2.2000	12.1699	0.0000	11,615.4691	11,615.4691	1.4015	0.0000	11,650.5056
2020	227.2874	33.7061	27.2833	0.0793	2.9974	1.1994	4.1968	0.8134	1.1286	1.9420	0.0000	7,976.1239	7,976.1239	0.8585	0.0000	7,997.5865
Maximum	227.2874	60.2252	28.8306	0.1110	18.2141	2.3913	20.6055	9.9699	2.2000	12.1699	0.0000	11,615.4691	11,615.4691	1.4015	0.0000	11,650.5056

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

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Winter

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	10.4079	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811
Energy	0.3090	2.8091	2.3596	0.0169		0.2135	0.2135		0.2135	0.2135		3,370.8822	3,370.8822	0.0646	0.0618	3,390.9137
Mobile	7.8054	39.0134	95.4257	0.2942	25.3379	0.3323	25.6702	6.7802	0.3126	7.0928		29,704.1552	29,704.1552	1.1913		29,733.9385
Total	18.5223	41.8236	97.9090	0.3110	25.3379	0.5463	25.8841	6.7802	0.5266	7.3067		33,075.3008	33,075.3008	1.2567	0.0618	33,125.1332

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	9.7318	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811
Energy	0.2867	2.6065	2.1894	0.0156		0.1981	0.1981		0.1981	0.1981		3,127.7701	3,127.7701	0.0600	0.0573	3,146.3569
Mobile	7.5083	36.6621	88.6898	0.2666	22.8041	0.3023	23.1064	6.1021	0.2844	6.3865		26,920.8399	26,920.8399	1.1085		26,948.5535
Total	17.5269	39.2698	91.0029	0.2823	22.8041	0.5008	23.3049	6.1021	0.4829	6.5850		30,048.8734	30,048.8734	1.1692	0.0573	30,095.1914

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	5.37	6.11	7.05	9.25	10.00	8.31	9.96	10.00	8.30	9.88	0.00	9.15	9.15	6.96	7.22	9.15

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	1/7/2019	2/1/2019	5	20	
2	Site Preparation	Site Preparation	2/2/2019	2/15/2019	5	10	
3	Grading	Grading	2/16/2019	3/15/2019	5	20	
4	Building Construction	Building Construction	3/16/2019	1/31/2020	5	230	
5	Paving	Paving	2/1/2020	2/28/2020	5	20	
6	Architectural Coating	Architectural Coating	2/29/2020	3/27/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 633,828; Non-Residential Outdoor: 211,276; Striped Parking Area: 18,744 (Architectural Coating – sqft)

OffRoad Equipment

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

3000 - 3500 Marina Boulevard - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	2,025.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	266.00	120.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	53.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0603	0.0442	0.4223	1.1800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		117.0948	117.0948	3.1800e-003		117.1743
Total	0.0603	0.0442	0.4223	1.1800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		117.0948	117.0948	3.1800e-003		117.1743

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	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0603	0.0442	0.4223	1.1800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		117.0948	117.0948	3.1800e-003		117.1743
Total	0.0603	0.0442	0.4223	1.1800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		117.0948	117.0948	3.1800e-003		117.1743

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

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3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0724	0.0530	0.5068	1.4100e-003	0.1479	9.8000e-004	0.1488	0.0392	9.0000e-004	0.0401		140.5138	140.5138	3.8200e-003		140.6092
Total	0.0724	0.0530	0.5068	1.4100e-003	0.1479	9.8000e-004	0.1488	0.0392	9.0000e-004	0.0401		140.5138	140.5138	3.8200e-003		140.6092

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

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3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0724	0.0530	0.5068	1.4100e-003	0.1479	9.8000e-004	0.1488	0.0392	9.0000e-004	0.0401		140.5138	140.5138	3.8200e-003		140.6092
Total	0.0724	0.0530	0.5068	1.4100e-003	0.1479	9.8000e-004	0.1488	0.0392	9.0000e-004	0.0401		140.5138	140.5138	3.8200e-003		140.6092

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	6.5523	1.3974	7.9497	3.3675	1.2856	4.6531		2,936.8068	2,936.8068	0.9292		2,960.0361

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3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9395	31.8330	6.4821	0.0802	1.7688	0.1222	1.8910	0.4847	0.1169	0.6016		8,561.5675	8,561.5675	0.4691		8,573.2951
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	0.0603	0.0442	0.4223	1.1800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		117.0948	117.0948	3.1800e-003		117.1743
Total	0.9998	31.8772	6.9045	0.0813	1.8920	0.1230	2.0150	0.5174	0.1176	0.6350		8,678.6623	8,678.6623	0.4723		8,690.4694

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	6.5523	1.3974	7.9497	3.3675	1.2856	4.6531	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361

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3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9395	31.8330	6.4821	0.0802	1.7688	0.1222	1.8910	0.4847	0.1169	0.6016		8,561.5675	8,561.5675	0.4691		8,573.2951
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	0.0603	0.0442	0.4223	1.1800e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		117.0948	117.0948	3.1800e-003		117.1743
Total	0.9998	31.8772	6.9045	0.0813	1.8920	0.1230	2.0150	0.5174	0.1176	0.6350		8,678.6623	8,678.6623	0.4723		8,690.4694

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

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3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5833	15.1899	4.1777	0.0325	0.8123	0.1054	0.9176	0.2338	0.1008	0.3346		3,435.0243	3,435.0243	0.2018		3,440.0680
Worker	1.0694	0.7832	7.4891	0.0209	2.1851	0.0145	2.1996	0.5796	0.0133	0.5929		2,076.4809	2,076.4809	0.0564		2,077.8907
Total	1.6527	15.9731	11.6668	0.0533	2.9974	0.1199	3.1172	0.8134	0.1142	0.9276		5,511.5052	5,511.5052	0.2581		5,517.9587

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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

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3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5833	15.1899	4.1777	0.0325	0.8123	0.1054	0.9176	0.2338	0.1008	0.3346		3,435.024 3	3,435.024 3	0.2018		3,440.068 0
Worker	1.0694	0.7832	7.4891	0.0209	2.1851	0.0145	2.1996	0.5796	0.0133	0.5929		2,076.480 9	2,076.480 9	0.0564		2,077.890 7
Total	1.6527	15.9731	11.6668	0.0533	2.9974	0.1199	3.1172	0.8134	0.1142	0.9276		5,511.505 2	5,511.505 2	0.2581		5,517.958 7

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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3.5 Building Construction - 2020

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	0.4787	13.8285	3.7319	0.0322	0.8123	0.0682	0.8804	0.2338	0.0652	0.2990		3,411.9269	3,411.9269	0.1865		3,416.5883
Worker	0.9779	0.6916	6.7029	0.0202	2.1851	0.0142	2.1993	0.5796	0.0130	0.5926		2,011.1340	2,011.1340	0.0492		2,012.3637
Total	1.4567	14.5201	10.4348	0.0524	2.9974	0.0823	3.0797	0.8134	0.0782	0.8917		5,423.0609	5,423.0609	0.2357		5,428.9520

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

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3.5 Building Construction - 2020

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	0.4787	13.8285	3.7319	0.0322	0.8123	0.0682	0.8804	0.2338	0.0652	0.2990		3,411.9269	3,411.9269	0.1865		3,416.5883
Worker	0.9779	0.6916	6.7029	0.0202	2.1851	0.0142	2.1993	0.5796	0.0130	0.5926		2,011.1340	2,011.1340	0.0492		2,012.3637
Total	1.4567	14.5201	10.4348	0.0524	2.9974	0.0823	3.0797	0.8134	0.0782	0.8917		5,423.0609	5,423.0609	0.2357		5,428.9520

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.1140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4705	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

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3.6 Paving - 2020

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	0.0552	0.0390	0.3780	1.1400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		113.4098	113.4098	2.7700e-003		113.4792
Total	0.0552	0.0390	0.3780	1.1400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		113.4098	113.4098	2.7700e-003		113.4792

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.1140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4705	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

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3.6 Paving - 2020

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	0.0552	0.0390	0.3780	1.1400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		113.4098	113.4098	2.7700e-003		113.4792
Total	0.0552	0.0390	0.3780	1.1400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		113.4098	113.4098	2.7700e-003		113.4792

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	226.8503					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	227.0925	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020

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	0.1949	0.1378	1.3355	4.0200e-003	0.4354	2.8200e-003	0.4382	0.1155	2.6000e-003	0.1181		400.7147	400.7147	9.8000e-003		400.9597
Total	0.1949	0.1378	1.3355	4.0200e-003	0.4354	2.8200e-003	0.4382	0.1155	2.6000e-003	0.1181		400.7147	400.7147	9.8000e-003		400.9597

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	226.8503					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	227.0925	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020

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	0.1949	0.1378	1.3355	4.0200e-003	0.4354	2.8200e-003	0.4382	0.1155	2.6000e-003	0.1181		400.7147	400.7147	9.8000e-003		400.9597
Total	0.1949	0.1378	1.3355	4.0200e-003	0.4354	2.8200e-003	0.4382	0.1155	2.6000e-003	0.1181		400.7147	400.7147	9.8000e-003		400.9597

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.5083	36.6621	88.6898	0.2666	22.8041	0.3023	23.1064	6.1021	0.2844	6.3865		26,920.83 99	26,920.83 99	1.1085		26,948.55 35
Unmitigated	7.8054	39.0134	95.4257	0.2942	25.3379	0.3323	25.6702	6.7802	0.3126	7.0928		29,704.15 52	29,704.15 52	1.1913		29,733.93 85

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Research & Development	4,757.94	4,757.94	4,757.94	11,924,563	10,732,107
Total	4,757.94	4,757.94	4,757.94	11,924,563	10,732,107

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Parking Lot	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Research & Development	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2867	2.6065	2.1894	0.0156		0.1981	0.1981		0.1981	0.1981		3,127.770 1	3,127.770 1	0.0600	0.0573	3,146.356 9
NaturalGas Unmitigated	0.3090	2.8091	2.3596	0.0169		0.2135	0.2135		0.2135	0.2135		3,370.882 2	3,370.882 2	0.0646	0.0618	3,390.913 7

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5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	28652.5	0.3090	2.8091	2.3596	0.0169		0.2135	0.2135		0.2135	0.2135		3,370.8822	3,370.8822	0.0646	0.0618	3,390.9137
Total		0.3090	2.8091	2.3596	0.0169		0.2135	0.2135		0.2135	0.2135		3,370.8822	3,370.8822	0.0646	0.0618	3,390.9137

Mitigated

	Natural Gas 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					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	26.586	0.2867	2.6065	2.1894	0.0156		0.1981	0.1981		0.1981	0.1981		3,127.7701	3,127.7701	0.0600	0.0573	3,146.3569
Total		0.2867	2.6065	2.1894	0.0156		0.1981	0.1981		0.1981	0.1981		3,127.7701	3,127.7701	0.0600	0.0573	3,146.3569

6.0 Area Detail

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6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	9.7318	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004			0.2811
Unmitigated	10.4079	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004			0.2811

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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	1.2430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.1533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0116	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811
Total	10.4079	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811

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	1.2430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.4772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0116	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811
Total	9.7318	1.1400e-003	0.1237	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		0.2634	0.2634	7.1000e-004		0.2811

7.0 Water Detail

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7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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