

Tract 21240 Highland - San Bernardino-South Coast County, Annual

**Tract 21240 Highland**  
**San Bernardino-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	56.00	Dwelling Unit	18.18	100,800.00	160

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
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**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3014	2.9038	2.1000	3.6700e-003	0.2440	0.1544	0.3984	0.1099	0.1441	0.2540	0.0000	325.4034	325.4034	0.0821	0.0000	327.4554
2020	0.5146	1.7804	1.6195	2.7700e-003	0.0230	0.1001	0.1231	6.1900e-003	0.0940	0.1002	0.0000	240.9333	240.9333	0.0541	0.0000	242.2859
<b>Maximum</b>	<b>0.5146</b>	<b>2.9038</b>	<b>2.1000</b>	<b>3.6700e-003</b>	<b>0.2440</b>	<b>0.1544</b>	<b>0.3984</b>	<b>0.1099</b>	<b>0.1441</b>	<b>0.2540</b>	<b>0.0000</b>	<b>325.4034</b>	<b>325.4034</b>	<b>0.0821</b>	<b>0.0000</b>	<b>327.4554</b>

**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	0.3014	2.9037	2.1000	3.6700e-003	0.2440	0.1544	0.3984	0.1099	0.1441	0.2540	0.0000	325.4031	325.4031	0.0821	0.0000	327.4550
2020	0.5146	1.7804	1.6195	2.7700e-003	0.0230	0.1001	0.1231	6.1900e-003	0.0940	0.1002	0.0000	240.9331	240.9331	0.0541	0.0000	242.2857
<b>Maximum</b>	<b>0.5146</b>	<b>2.9037</b>	<b>2.1000</b>	<b>3.6700e-003</b>	<b>0.2440</b>	<b>0.1544</b>	<b>0.3984</b>	<b>0.1099</b>	<b>0.1441</b>	<b>0.2540</b>	<b>0.0000</b>	<b>325.4031</b>	<b>325.4031</b>	<b>0.0821</b>	<b>0.0000</b>	<b>327.4550</b>

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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	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2019	6-30-2019	1.5868	1.5868
2	7-1-2019	9-30-2019	0.8001	0.8001
3	10-1-2019	12-31-2019	0.8001	0.8001
4	1-1-2020	3-31-2020	0.7194	0.7194
5	4-1-2020	6-30-2020	0.7194	0.7194
6	7-1-2020	9-30-2020	0.7386	0.7386
		Highest	1.5868	1.5868

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5969	0.0212	0.9354	9.4000e-004		0.0567	0.0567		0.0567	0.0567	5.9483	12.3739	18.3222	0.0187	4.0000e-004	18.9089
Energy	9.2400e-003	0.0790	0.0336	5.0000e-004		6.3800e-003	6.3800e-003		6.3800e-003	6.3800e-003	0.0000	246.9591	246.9591	8.1700e-003	3.0000e-003	248.0589
Mobile	0.2030	1.5323	2.5858	9.3600e-003	0.6884	8.5700e-003	0.6970	0.1845	8.0600e-003	0.1926	0.0000	865.2699	865.2699	0.0468	0.0000	866.4391
Waste						0.0000	0.0000		0.0000	0.0000	13.3162	0.0000	13.3162	0.7870	0.0000	32.9903
Water						0.0000	0.0000		0.0000	0.0000	1.1575	23.2798	24.4374	0.1199	3.0100e-003	28.3295
<b>Total</b>	<b>0.8091</b>	<b>1.6325</b>	<b>3.5549</b>	<b>0.0108</b>	<b>0.6884</b>	<b>0.0716</b>	<b>0.7600</b>	<b>0.1845</b>	<b>0.0711</b>	<b>0.2556</b>	<b>20.4220</b>	<b>1,147.8827</b>	<b>1,168.3048</b>	<b>0.9804</b>	<b>6.4100e-003</b>	<b>1,194.7267</b>

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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	0.5969	0.0212	0.9354	9.4000e-004		0.0567	0.0567		0.0567	0.0567	5.9483	12.3739	18.3222	0.0187	4.0000e-004	18.9089
Energy	8.8700e-003	0.0758	0.0323	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	242.4395	242.4395	8.0700e-003	2.9300e-003	243.5144
Mobile	0.2030	1.5323	2.5858	9.3600e-003	0.6884	8.5700e-003	0.6970	0.1845	8.0600e-003	0.1926	0.0000	865.2699	865.2699	0.0468	0.0000	866.4391
Waste						0.0000	0.0000		0.0000	0.0000	3.3291	0.0000	3.3291	0.1967	0.0000	8.2476
Water						0.0000	0.0000		0.0000	0.0000	0.9260	18.6239	19.5499	0.0959	2.4000e-003	22.6636
<b>Total</b>	<b>0.8087</b>	<b>1.6293</b>	<b>3.5535</b>	<b>0.0108</b>	<b>0.6884</b>	<b>0.0714</b>	<b>0.7598</b>	<b>0.1845</b>	<b>0.0709</b>	<b>0.2554</b>	<b>10.2034</b>	<b>1,138.7071</b>	<b>1,148.9105</b>	<b>0.3661</b>	<b>5.7300e-003</b>	<b>1,159.7735</b>

	ROG	NOx	CO	SO2	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	0.05	0.19	0.04	0.19	0.00	0.35	0.03	0.00	0.35	0.10	50.04	0.80	1.66	62.66	10.61	2.93

**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	4/1/2019	4/26/2019	5	20	
2	Site Preparation	Site Preparation	4/27/2019	5/10/2019	5	10	
3	Grading	Grading	5/11/2019	6/21/2019	5	30	
4	Building Construction	Building Construction	6/22/2019	8/14/2020	5	300	
5	Paving	Paving	8/15/2020	9/11/2020	5	20	
6	Architectural Coating	Architectural Coating	9/12/2020	10/9/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 75**

**Acres of Paving: 0**

**Residential Indoor: 204,120; Residential Outdoor: 68,040; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (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	2	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	2	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
Grading	Scrapers	2	8.00	367	0.48
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	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	20.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	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
<b>Total</b>	<b>0.0351</b>	<b>0.3578</b>	<b>0.2206</b>	<b>3.9000e-004</b>		<b>0.0180</b>	<b>0.0180</b>		<b>0.0167</b>	<b>0.0167</b>	<b>0.0000</b>	<b>34.6263</b>	<b>34.6263</b>	<b>9.6300e-003</b>	<b>0.0000</b>	<b>34.8672</b>

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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	8.0000e-004	6.6000e-004	6.4600e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4551	1.4551	5.0000e-005	0.0000	1.4563
<b>Total</b>	<b>8.0000e-004</b>	<b>6.6000e-004</b>	<b>6.4600e-003</b>	<b>2.0000e-005</b>	<b>1.6400e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.4551</b>	<b>1.4551</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.4563</b>

**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
<b>Total</b>	<b>0.0351</b>	<b>0.3578</b>	<b>0.2206</b>	<b>3.9000e-004</b>		<b>0.0180</b>	<b>0.0180</b>		<b>0.0167</b>	<b>0.0167</b>	<b>0.0000</b>	<b>34.6263</b>	<b>34.6263</b>	<b>9.6300e-003</b>	<b>0.0000</b>	<b>34.8671</b>



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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	8.0000e-004	6.6000e-004	6.4600e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4551	1.4551	5.0000e-005	0.0000	1.4563
<b>Total</b>	<b>8.0000e-004</b>	<b>6.6000e-004</b>	<b>6.4600e-003</b>	<b>2.0000e-005</b>	<b>1.6400e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.4551</b>	<b>1.4551</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.4563</b>

**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
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>0.0120</b>	<b>0.1023</b>	<b>0.0497</b>	<b>0.0110</b>	<b>0.0607</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>

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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	4.8000e-004	3.9000e-004	3.8800e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8731	0.8731	3.0000e-005	0.0000	0.8738
<b>Total</b>	<b>4.8000e-004</b>	<b>3.9000e-004</b>	<b>3.8800e-003</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>2.6000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.8731</b>	<b>0.8731</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.8738</b>

**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
<b>Total</b>	<b>0.0217</b>	<b>0.2279</b>	<b>0.1103</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>0.0120</b>	<b>0.1023</b>	<b>0.0497</b>	<b>0.0110</b>	<b>0.0607</b>	<b>0.0000</b>	<b>17.0843</b>	<b>17.0843</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>17.2195</b>

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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	4.8000e-004	3.9000e-004	3.8800e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8731	0.8731	3.0000e-005	0.0000	0.8738
<b>Total</b>	<b>4.8000e-004</b>	<b>3.9000e-004</b>	<b>3.8800e-003</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>2.6000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.8731</b>	<b>0.8731</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.8738</b>

**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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
<b>Total</b>	<b>0.0711</b>	<b>0.8178</b>	<b>0.5007</b>	<b>9.3000e-004</b>	<b>0.1301</b>	<b>0.0357</b>	<b>0.1658</b>	<b>0.0540</b>	<b>0.0329</b>	<b>0.0868</b>	<b>0.0000</b>	<b>83.5520</b>	<b>83.5520</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2129</b>

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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	0.0000	0.0000	0.0000	0.0000	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	1.6100e-003	1.3100e-003	0.0129	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	8.9000e-004	0.0000	2.9102	2.9102	1.0000e-004	0.0000	2.9126
<b>Total</b>	<b>1.6100e-003</b>	<b>1.3100e-003</b>	<b>0.0129</b>	<b>3.0000e-005</b>	<b>3.2900e-003</b>	<b>2.0000e-005</b>	<b>3.3100e-003</b>	<b>8.7000e-004</b>	<b>2.0000e-005</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>2.9102</b>	<b>2.9102</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>2.9126</b>

**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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
<b>Total</b>	<b>0.0711</b>	<b>0.8178</b>	<b>0.5007</b>	<b>9.3000e-004</b>	<b>0.1301</b>	<b>0.0357</b>	<b>0.1658</b>	<b>0.0540</b>	<b>0.0329</b>	<b>0.0868</b>	<b>0.0000</b>	<b>83.5519</b>	<b>83.5519</b>	<b>0.0264</b>	<b>0.0000</b>	<b>84.2128</b>

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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	0.0000	0.0000	0.0000	0.0000	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	1.6100e-003	1.3100e-003	0.0129	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	8.9000e-004	0.0000	2.9102	2.9102	1.0000e-004	0.0000	2.9126
<b>Total</b>	<b>1.6100e-003</b>	<b>1.3100e-003</b>	<b>0.0129</b>	<b>3.0000e-005</b>	<b>3.2900e-003</b>	<b>2.0000e-005</b>	<b>3.3100e-003</b>	<b>8.7000e-004</b>	<b>2.0000e-005</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>2.9102</b>	<b>2.9102</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>2.9126</b>

**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	0.1617	1.4439	1.1757	1.8400e-003		0.0884	0.0884		0.0831	0.0831	0.0000	161.0464	161.0464	0.0392	0.0000	162.0272
<b>Total</b>	<b>0.1617</b>	<b>1.4439</b>	<b>1.1757</b>	<b>1.8400e-003</b>		<b>0.0884</b>	<b>0.0884</b>		<b>0.0831</b>	<b>0.0831</b>	<b>0.0000</b>	<b>161.0464</b>	<b>161.0464</b>	<b>0.0392</b>	<b>0.0000</b>	<b>162.0272</b>

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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	1.5000e-003	0.0480	0.0104	1.1000e-004	2.5900e-003	3.0000e-004	2.8900e-003	7.5000e-004	2.8000e-004	1.0300e-003	0.0000	10.5661	10.5661	7.6000e-004	0.0000	10.5852
Worker	7.3500e-003	5.9900e-003	0.0590	1.5000e-004	0.0150	1.0000e-004	0.0151	3.9900e-003	9.0000e-005	4.0800e-003	0.0000	13.2899	13.2899	4.4000e-004	0.0000	13.3009
<b>Total</b>	<b>8.8500e-003</b>	<b>0.0540</b>	<b>0.0694</b>	<b>2.6000e-004</b>	<b>0.0176</b>	<b>4.0000e-004</b>	<b>0.0180</b>	<b>4.7400e-003</b>	<b>3.7000e-004</b>	<b>5.1100e-003</b>	<b>0.0000</b>	<b>23.8560</b>	<b>23.8560</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>23.8860</b>

**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	0.1617	1.4439	1.1757	1.8400e-003		0.0884	0.0884		0.0831	0.0831	0.0000	161.0462	161.0462	0.0392	0.0000	162.0270
<b>Total</b>	<b>0.1617</b>	<b>1.4439</b>	<b>1.1757</b>	<b>1.8400e-003</b>		<b>0.0884</b>	<b>0.0884</b>		<b>0.0831</b>	<b>0.0831</b>	<b>0.0000</b>	<b>161.0462</b>	<b>161.0462</b>	<b>0.0392</b>	<b>0.0000</b>	<b>162.0270</b>

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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	1.5000e-003	0.0480	0.0104	1.1000e-004	2.5900e-003	3.0000e-004	2.8900e-003	7.5000e-004	2.8000e-004	1.0300e-003	0.0000	10.5661	10.5661	7.6000e-004	0.0000	10.5852
Worker	7.3500e-003	5.9900e-003	0.0590	1.5000e-004	0.0150	1.0000e-004	0.0151	3.9900e-003	9.0000e-005	4.0800e-003	0.0000	13.2899	13.2899	4.4000e-004	0.0000	13.3009
<b>Total</b>	<b>8.8500e-003</b>	<b>0.0540</b>	<b>0.0694</b>	<b>2.6000e-004</b>	<b>0.0176</b>	<b>4.0000e-004</b>	<b>0.0180</b>	<b>4.7400e-003</b>	<b>3.7000e-004</b>	<b>5.1100e-003</b>	<b>0.0000</b>	<b>23.8560</b>	<b>23.8560</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>23.8860</b>

**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	0.1728	1.5637	1.3732	2.1900e-003		0.0910	0.0910		0.0856	0.0856	0.0000	188.7621	188.7621	0.0461	0.0000	189.9134
<b>Total</b>	<b>0.1728</b>	<b>1.5637</b>	<b>1.3732</b>	<b>2.1900e-003</b>		<b>0.0910</b>	<b>0.0910</b>		<b>0.0856</b>	<b>0.0856</b>	<b>0.0000</b>	<b>188.7621</b>	<b>188.7621</b>	<b>0.0461</b>	<b>0.0000</b>	<b>189.9134</b>

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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	1.5200e-003	0.0522	0.0109	1.3000e-004	3.0800e-003	2.4000e-004	3.3200e-003	8.9000e-004	2.3000e-004	1.1200e-003	0.0000	12.4850	12.4850	8.6000e-004	0.0000	12.5066
Worker	8.0500e-003	6.3300e-003	0.0632	1.7000e-004	0.0179	1.2000e-004	0.0180	4.7500e-003	1.1000e-004	4.8600e-003	0.0000	15.3191	15.3191	4.6000e-004	0.0000	15.3306
<b>Total</b>	<b>9.5700e-003</b>	<b>0.0585</b>	<b>0.0741</b>	<b>3.0000e-004</b>	<b>0.0210</b>	<b>3.6000e-004</b>	<b>0.0213</b>	<b>5.6400e-003</b>	<b>3.4000e-004</b>	<b>5.9800e-003</b>	<b>0.0000</b>	<b>27.8041</b>	<b>27.8041</b>	<b>1.3200e-003</b>	<b>0.0000</b>	<b>27.8372</b>

**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	0.1728	1.5637	1.3732	2.1900e-003		0.0910	0.0910		0.0856	0.0856	0.0000	188.7619	188.7619	0.0461	0.0000	189.9132
<b>Total</b>	<b>0.1728</b>	<b>1.5637</b>	<b>1.3732</b>	<b>2.1900e-003</b>		<b>0.0910</b>	<b>0.0910</b>		<b>0.0856</b>	<b>0.0856</b>	<b>0.0000</b>	<b>188.7619</b>	<b>188.7619</b>	<b>0.0461</b>	<b>0.0000</b>	<b>189.9132</b>



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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	1.5200e-003	0.0522	0.0109	1.3000e-004	3.0800e-003	2.4000e-004	3.3200e-003	8.9000e-004	2.3000e-004	1.1200e-003	0.0000	12.4850	12.4850	8.6000e-004	0.0000	12.5066
Worker	8.0500e-003	6.3300e-003	0.0632	1.7000e-004	0.0179	1.2000e-004	0.0180	4.7500e-003	1.1000e-004	4.8600e-003	0.0000	15.3191	15.3191	4.6000e-004	0.0000	15.3306
<b>Total</b>	<b>9.5700e-003</b>	<b>0.0585</b>	<b>0.0741</b>	<b>3.0000e-004</b>	<b>0.0210</b>	<b>3.6000e-004</b>	<b>0.0213</b>	<b>5.6400e-003</b>	<b>3.4000e-004</b>	<b>5.9800e-003</b>	<b>0.0000</b>	<b>27.8041</b>	<b>27.8041</b>	<b>1.3200e-003</b>	<b>0.0000</b>	<b>27.8372</b>

**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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0136</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1902</b>

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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	7.4000e-004	5.8000e-004	5.8200e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4097	1.4097	4.0000e-005	0.0000	1.4108
<b>Total</b>	<b>7.4000e-004</b>	<b>5.8000e-004</b>	<b>5.8200e-003</b>	<b>2.0000e-005</b>	<b>1.6400e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.4097</b>	<b>1.4097</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.4108</b>

**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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0136</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1901</b>

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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	7.4000e-004	5.8000e-004	5.8200e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4097	1.4097	4.0000e-005	0.0000	1.4108
<b>Total</b>	<b>7.4000e-004</b>	<b>5.8000e-004</b>	<b>5.8200e-003</b>	<b>2.0000e-005</b>	<b>1.6400e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.4097</b>	<b>1.4097</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.4108</b>

**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	0.3154					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
<b>Total</b>	<b>0.3178</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

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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	2.0000e-004	1.6000e-004	1.5500e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3759	0.3759	1.0000e-005	0.0000	0.3762
<b>Total</b>	<b>2.0000e-004</b>	<b>1.6000e-004</b>	<b>1.5500e-003</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3759</b>	<b>0.3759</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3762</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3154					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
<b>Total</b>	<b>0.3178</b>	<b>0.0168</b>	<b>0.0183</b>	<b>3.0000e-005</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>		<b>1.1100e-003</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.5582</b>

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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	2.0000e-004	1.6000e-004	1.5500e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3759	0.3759	1.0000e-005	0.0000	0.3762
<b>Total</b>	<b>2.0000e-004</b>	<b>1.6000e-004</b>	<b>1.5500e-003</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3759</b>	<b>0.3759</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3762</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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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	0.2030	1.5323	2.5858	9.3600e-003	0.6884	8.5700e-003	0.6970	0.1845	8.0600e-003	0.1926	0.0000	865.2699	865.2699	0.0468	0.0000	866.4391
Unmitigated	0.2030	1.5323	2.5858	9.3600e-003	0.6884	8.5700e-003	0.6970	0.1845	8.0600e-003	0.1926	0.0000	865.2699	865.2699	0.0468	0.0000	866.4391

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	533.12	554.96	482.72	1,807,810	1,807,810
Total	533.12	554.96	482.72	1,807,810	1,807,810

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
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082

5.0 Energy Detail

Historical Energy Use: N

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**5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive 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	154.6774	154.6774	6.3900e-003	1.3200e-003	155.2308
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	155.5264	155.5264	6.4200e-003	1.3300e-003	156.0828
NaturalGas Mitigated	8.8700e-003	0.0758	0.0323	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7621	87.7621	1.6800e-003	1.6100e-003	88.2836
NaturalGas Unmitigated	9.2400e-003	0.0790	0.0336	5.0000e-004		6.3800e-003	6.3800e-003		6.3800e-003	6.3800e-003	0.0000	91.4327	91.4327	1.7500e-003	1.6800e-003	91.9761

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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					
Single Family Housing	1.71338e+006	9.2400e-003	0.0790	0.0336	5.0000e-004		6.3800e-003	6.3800e-003		6.3800e-003	6.3800e-003	0.0000	91.4327	91.4327	1.7500e-003	1.6800e-003	91.9761
<b>Total</b>		<b>9.2400e-003</b>	<b>0.0790</b>	<b>0.0336</b>	<b>5.0000e-004</b>		<b>6.3800e-003</b>	<b>6.3800e-003</b>		<b>6.3800e-003</b>	<b>6.3800e-003</b>	<b>0.0000</b>	<b>91.4327</b>	<b>91.4327</b>	<b>1.7500e-003</b>	<b>1.6800e-003</b>	<b>91.9761</b>

**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					
Single Family Housing	1.6446e+006	8.8700e-003	0.0758	0.0323	4.8000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	87.7621	87.7621	1.6800e-003	1.6100e-003	88.2836
<b>Total</b>		<b>8.8700e-003</b>	<b>0.0758</b>	<b>0.0323</b>	<b>4.8000e-004</b>		<b>6.1300e-003</b>	<b>6.1300e-003</b>		<b>6.1300e-003</b>	<b>6.1300e-003</b>	<b>0.0000</b>	<b>87.7621</b>	<b>87.7621</b>	<b>1.6800e-003</b>	<b>1.6100e-003</b>	<b>88.2836</b>



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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			
Single Family Housing	488123	155.5264	6.4200e-003	1.3300e-003	156.0828
<b>Total</b>		<b>155.5264</b>	<b>6.4200e-003</b>	<b>1.3300e-003</b>	<b>156.0828</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	485458	154.6774	6.3900e-003	1.3200e-003	155.2308
<b>Total</b>		<b>154.6774</b>	<b>6.3900e-003</b>	<b>1.3200e-003</b>	<b>155.2308</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5969	0.0212	0.9354	9.4000e-004		0.0567	0.0567		0.0567	0.0567	5.9483	12.3739	18.3222	0.0187	4.0000e-004	18.9089
Unmitigated	0.5969	0.0212	0.9354	9.4000e-004		0.0567	0.0567		0.0567	0.0567	5.9483	12.3739	18.3222	0.0187	4.0000e-004	18.9089

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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	0.0315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3642					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1834	0.0145	0.3560	9.1000e-004		0.0535	0.0535		0.0535	0.0535	5.9483	11.4305	17.3788	0.0177	4.0000e-004	17.9426
Landscaping	0.0176	6.7000e-003	0.5794	3.0000e-005		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003	0.0000	0.9434	0.9434	9.2000e-004	0.0000	0.9664
<b>Total</b>	<b>0.5969</b>	<b>0.0212</b>	<b>0.9354</b>	<b>9.4000e-004</b>		<b>0.0567</b>	<b>0.0567</b>		<b>0.0567</b>	<b>0.0567</b>	<b>5.9483</b>	<b>12.3739</b>	<b>18.3222</b>	<b>0.0187</b>	<b>4.0000e-004</b>	<b>18.9089</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3642					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1834	0.0145	0.3560	9.1000e-004		0.0535	0.0535		0.0535	0.0535	5.9483	11.4305	17.3788	0.0177	4.0000e-004	17.9426
Landscaping	0.0176	6.7000e-003	0.5794	3.0000e-005		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003	0.0000	0.9434	0.9434	9.2000e-004	0.0000	0.9664
<b>Total</b>	<b>0.5969</b>	<b>0.0212</b>	<b>0.9354</b>	<b>9.4000e-004</b>		<b>0.0567</b>	<b>0.0567</b>		<b>0.0567</b>	<b>0.0567</b>	<b>5.9483</b>	<b>12.3739</b>	<b>18.3222</b>	<b>0.0187</b>	<b>4.0000e-004</b>	<b>18.9089</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	19.5499	0.0959	2.4000e-003	22.6636
Unmitigated	24.4374	0.1199	3.0100e-003	28.3295

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	3.64863 / 2.30022	24.4374	0.1199	3.0100e-003	28.3295
<b>Total</b>		<b>24.4374</b>	<b>0.1199</b>	<b>3.0100e-003</b>	<b>28.3295</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.9189 / 1.84018	19.5499	0.0959	2.4000e-003	22.6636
<b>Total</b>		<b>19.5499</b>	<b>0.0959</b>	<b>2.4000e-003</b>	<b>22.6636</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

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**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.3291	0.1967	0.0000	8.2476
Unmitigated	13.3162	0.7870	0.0000	32.9903

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	65.6	13.3162	0.7870	0.0000	32.9903
<b>Total</b>		<b>13.3162</b>	<b>0.7870</b>	<b>0.0000</b>	<b>32.9903</b>

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**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	16.4	3.3291	0.1967	0.0000	8.2476
<b>Total</b>		<b>3.3291</b>	<b>0.1967</b>	<b>0.0000</b>	<b>8.2476</b>

**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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