

# **Appendix A**

## **CalEEMod Modeling Results**

Royal Oaks Village - Bay Area AQMD Air District, Annual

**Royal Oaks Village**  
**Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	140.00	Space	1.34	56,000.00	0
Apartments Mid Rise	73.00	Dwelling Unit	2.87	73,000.00	209
Other Asphalt Surfaces	89.50	1000sqft	2.05	89,500.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2023
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	257.69	<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**

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Project Characteristics - CO2 intensity factor updated per PG&E's RPS projections.

Land Use - Lot acreages updated per site plan.

Construction Phase - Construction phase timing based on AQ Questionnaire.

Trips and VMT - Site prep and grading phase haul trip lengths adjusted per AQ Questionnaire.

Demolition -

Grading -

Vehicle Trips - Trip generation updated to be consistent with project-specific traffic report.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Title 24 exceedance applied to reflect to compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy per AQ Questionnaire and compliance with CalGreen Code

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	35.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	PhaseEndDate	5/22/2023	7/31/2023
tblConstructionPhase	PhaseEndDate	3/27/2023	7/17/2023
tblConstructionPhase	PhaseEndDate	3/28/2022	3/14/2022
tblConstructionPhase	PhaseEndDate	5/9/2022	6/27/2022
tblConstructionPhase	PhaseEndDate	4/24/2023	7/18/2022
tblConstructionPhase	PhaseEndDate	4/11/2022	5/9/2022
tblConstructionPhase	PhaseStartDate	4/25/2023	8/2/2022
tblConstructionPhase	PhaseStartDate	5/10/2022	7/19/2022

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tblConstructionPhase	PhaseStartDate	4/12/2022	5/10/2022
tblConstructionPhase	PhaseStartDate	3/28/2023	6/28/2022
tblConstructionPhase	PhaseStartDate	3/29/2022	3/15/2022
tblGrading	MaterialExported	0.00	300.00
tblGrading	MaterialImported	0.00	4,929.00
tblLandUse	LotAcreage	1.26	1.34
tblLandUse	LotAcreage	1.92	2.87
tblProjectCharacteristics	CO2IntensityFactor	641.35	257.69
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	WD_TR	6.65	5.44

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2022	5-31-2022	1.1011	1.1011
2	6-1-2022	8-31-2022	0.7354	0.7354
3	9-1-2022	11-30-2022	0.8795	0.8795
4	12-1-2022	2-28-2023	0.8228	0.8228
5	3-1-2023	5-31-2023	0.8132	0.8132
6	6-1-2023	8-31-2023	0.4439	0.4439
		Highest	1.1011	1.1011

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	0.5339	0.0101	0.7762	4.9000e-004		0.0362	0.0362		0.0362	0.0362	3.3281	2.2565	5.5845	6.2100e-003	2.2000e-004	5.8049
Energy	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	71.1724	71.1724	4.8700e-003	1.4900e-003	71.7383
Mobile	0.0903	0.4000	1.0260	3.8200e-003	0.3413	3.1300e-003	0.3445	0.0916	2.9200e-003	0.0945	0.0000	350.6061	350.6061	0.0122	0.0000	350.9105
Waste						0.0000	0.0000		0.0000	0.0000	6.8164	0.0000	6.8164	0.4028	0.0000	16.8874
Water						0.0000	0.0000		0.0000	0.0000	1.5089	4.2349	5.7438	0.1555	3.7600e-003	10.7502
<b>Total</b>	<b>0.6276</b>	<b>0.4392</b>	<b>1.8146</b>	<b>4.5000e-003</b>	<b>0.3413</b>	<b>0.0417</b>	<b>0.3830</b>	<b>0.0916</b>	<b>0.0414</b>	<b>0.1331</b>	<b>11.6534</b>	<b>428.2699</b>	<b>439.9233</b>	<b>0.5816</b>	<b>5.4700e-003</b>	<b>456.0912</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	0.3655	6.2700e-003	0.5443	3.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	0.8895	0.8895	8.6000e-004	0.0000	0.9111
Energy	3.2500e-003	0.0278	0.0118	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.1599	32.1599	6.2000e-004	5.9000e-004	32.3510
Mobile	0.0881	0.3865	0.9741	3.5700e-003	0.3178	2.9400e-003	0.3207	0.0853	2.7400e-003	0.0880	0.0000	328.2344	328.2344	0.0116	0.0000	328.5236
Waste						0.0000	0.0000		0.0000	0.0000	6.8164	0.0000	6.8164	0.4028	0.0000	16.8874
Water						0.0000	0.0000		0.0000	0.0000	1.2072	3.2284	4.4356	0.1244	3.0000e-003	8.4391
<b>Total</b>	<b>0.4568</b>	<b>0.4206</b>	<b>1.5302</b>	<b>3.7800e-003</b>	<b>0.3178</b>	<b>8.2000e-003</b>	<b>0.3260</b>	<b>0.0853</b>	<b>8.0000e-003</b>	<b>0.0933</b>	<b>8.0236</b>	<b>364.5123</b>	<b>372.5359</b>	<b>0.5402</b>	<b>3.5900e-003</b>	<b>387.1122</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
<b>Percent Reduction</b>	<b>27.21</b>	<b>4.24</b>	<b>15.67</b>	<b>16.00</b>	<b>6.90</b>	<b>80.31</b>	<b>14.88</b>	<b>6.90</b>	<b>80.69</b>	<b>29.88</b>	<b>31.15</b>	<b>14.89</b>	<b>15.32</b>	<b>7.10</b>	<b>34.37</b>	<b>15.12</b>

**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	3/1/2022	3/14/2022	5	10	
2	Site Preparation	Site Preparation	3/15/2022	5/9/2022	5	40	
3	Grading	Grading	5/10/2022	6/27/2022	5	35	
4	Building Construction	Building Construction	7/19/2022	7/17/2023	5	260	
5	Paving	Paving	6/28/2022	7/18/2022	5	15	
6	Architectural Coating	Architectural Coating	8/2/2022	7/31/2023	5	260	

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

**Acres of Grading (Grading Phase): 17.5**

**Acres of Paving: 3.39**

**Residential Indoor: 147,825; Residential Outdoor: 49,275; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,730 (Architectural Coating – sqft)**

**OffRoad Equipment**

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

**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	238.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	38.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	616.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	114.00	32.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2022**

**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					0.0257	0.0000	0.0257	3.8900e-003	0.0000	3.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1286	0.1030	1.9000e-004	6.2100e-003	6.2100e-003	6.2100e-003	5.7800e-003	5.7800e-003	5.7800e-003	0.0000	16.9951	16.9951	4.7700e-003	0.0000	17.1145
<b>Total</b>	<b>0.0132</b>	<b>0.1286</b>	<b>0.1030</b>	<b>1.9000e-004</b>	<b>0.0257</b>	<b>6.2100e-003</b>	<b>0.0319</b>	<b>3.8900e-003</b>	<b>5.7800e-003</b>	<b>9.6700e-003</b>	<b>0.0000</b>	<b>16.9951</b>	<b>16.9951</b>	<b>4.7700e-003</b>	<b>0.0000</b>	<b>17.1145</b>

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**3.2 Demolition - 2022**

**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	8.8000e-004	0.0295	6.7200e-003	9.0000e-005	2.0100e-003	9.0000e-005	2.1000e-003	5.5000e-004	8.0000e-005	6.3000e-004	0.0000	8.8803	8.8803	4.5000e-004	0.0000	8.8915
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	2.1000e-004	1.4000e-004	1.5500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4826	0.4826	1.0000e-005	0.0000	0.4829
<b>Total</b>	<b>1.0900e-003</b>	<b>0.0297</b>	<b>8.2700e-003</b>	<b>1.0000e-004</b>	<b>2.6000e-003</b>	<b>9.0000e-005</b>	<b>2.7000e-003</b>	<b>7.1000e-004</b>	<b>8.0000e-005</b>	<b>7.9000e-004</b>	<b>0.0000</b>	<b>9.3629</b>	<b>9.3629</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>9.3744</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					0.0257	0.0000	0.0257	3.8900e-003	0.0000	3.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1286	0.1030	1.9000e-004		6.2100e-003	6.2100e-003		5.7800e-003	5.7800e-003	0.0000	16.9951	16.9951	4.7700e-003	0.0000	17.1144
<b>Total</b>	<b>0.0132</b>	<b>0.1286</b>	<b>0.1030</b>	<b>1.9000e-004</b>	<b>0.0257</b>	<b>6.2100e-003</b>	<b>0.0319</b>	<b>3.8900e-003</b>	<b>5.7800e-003</b>	<b>9.6700e-003</b>	<b>0.0000</b>	<b>16.9951</b>	<b>16.9951</b>	<b>4.7700e-003</b>	<b>0.0000</b>	<b>17.1144</b>

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**3.2 Demolition - 2022**

**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	8.8000e-004	0.0295	6.7200e-003	9.0000e-005	2.0100e-003	9.0000e-005	2.1000e-003	5.5000e-004	8.0000e-005	6.3000e-004	0.0000	8.8803	8.8803	4.5000e-004	0.0000	8.8915
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	2.1000e-004	1.4000e-004	1.5500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4826	0.4826	1.0000e-005	0.0000	0.4829
<b>Total</b>	<b>1.0900e-003</b>	<b>0.0297</b>	<b>8.2700e-003</b>	<b>1.0000e-004</b>	<b>2.6000e-003</b>	<b>9.0000e-005</b>	<b>2.7000e-003</b>	<b>7.1000e-004</b>	<b>8.0000e-005</b>	<b>7.9000e-004</b>	<b>0.0000</b>	<b>9.3629</b>	<b>9.3629</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>9.3744</b>

**3.3 Site Preparation - 2022**

**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					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0634	0.6617	0.3940	7.6000e-004		0.0323	0.0323		0.0297	0.0297	0.0000	66.8788	66.8788	0.0216	0.0000	67.4195
<b>Total</b>	<b>0.0634</b>	<b>0.6617</b>	<b>0.3940</b>	<b>7.6000e-004</b>	<b>0.3613</b>	<b>0.0323</b>	<b>0.3936</b>	<b>0.1986</b>	<b>0.0297</b>	<b>0.2283</b>	<b>0.0000</b>	<b>66.8788</b>	<b>66.8788</b>	<b>0.0216</b>	<b>0.0000</b>	<b>67.4195</b>

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**3.3 Site Preparation - 2022**

**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	6.0000e-005	2.5900e-003	4.9000e-004	1.0000e-005	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.5507	0.5507	4.0000e-005	0.0000	0.5517
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	1.0300e-003	6.8000e-004	7.4200e-003	3.0000e-005	2.8400e-003	2.0000e-005	2.8600e-003	7.6000e-004	2.0000e-005	7.7000e-004	0.0000	2.3166	2.3166	5.0000e-005	0.0000	2.3178
<b>Total</b>	<b>1.0900e-003</b>	<b>3.2700e-003</b>	<b>7.9100e-003</b>	<b>4.0000e-005</b>	<b>2.9400e-003</b>	<b>2.0000e-005</b>	<b>2.9600e-003</b>	<b>7.9000e-004</b>	<b>2.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.8673</b>	<b>2.8673</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.8695</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					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0634	0.6617	0.3940	7.6000e-004		0.0323	0.0323		0.0297	0.0297	0.0000	66.8787	66.8787	0.0216	0.0000	67.4195
<b>Total</b>	<b>0.0634</b>	<b>0.6617</b>	<b>0.3940</b>	<b>7.6000e-004</b>	<b>0.3613</b>	<b>0.0323</b>	<b>0.3936</b>	<b>0.1986</b>	<b>0.0297</b>	<b>0.2283</b>	<b>0.0000</b>	<b>66.8787</b>	<b>66.8787</b>	<b>0.0216</b>	<b>0.0000</b>	<b>67.4195</b>

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**3.3 Site Preparation - 2022**

**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	6.0000e-005	2.5900e-003	4.9000e-004	1.0000e-005	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.5507	0.5507	4.0000e-005	0.0000	0.5517
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	1.0300e-003	6.8000e-004	7.4200e-003	3.0000e-005	2.8400e-003	2.0000e-005	2.8600e-003	7.6000e-004	2.0000e-005	7.7000e-004	0.0000	2.3166	2.3166	5.0000e-005	0.0000	2.3178
<b>Total</b>	<b>1.0900e-003</b>	<b>3.2700e-003</b>	<b>7.9100e-003</b>	<b>4.0000e-005</b>	<b>2.9400e-003</b>	<b>2.0000e-005</b>	<b>2.9600e-003</b>	<b>7.9000e-004</b>	<b>2.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.8673</b>	<b>2.8673</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.8695</b>

**3.4 Grading - 2022**

**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					0.1149	0.0000	0.1149	0.0590	0.0000	0.0590	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0341	0.3650	0.2673	5.2000e-004		0.0165	0.0165		0.0152	0.0152	0.0000	45.5958	45.5958	0.0148	0.0000	45.9645
<b>Total</b>	<b>0.0341</b>	<b>0.3650</b>	<b>0.2673</b>	<b>5.2000e-004</b>	<b>0.1149</b>	<b>0.0165</b>	<b>0.1314</b>	<b>0.0590</b>	<b>0.0152</b>	<b>0.0741</b>	<b>0.0000</b>	<b>45.5958</b>	<b>45.5958</b>	<b>0.0148</b>	<b>0.0000</b>	<b>45.9645</b>

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**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0300e-003	0.0420	7.9200e-003	9.0000e-005	1.5700e-003	7.0000e-005	1.6400e-003	4.3000e-004	7.0000e-005	5.0000e-004	0.0000	8.9270	8.9270	6.3000e-004	0.0000	8.9428
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	7.5000e-004	5.0000e-004	5.4100e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0900e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6892	1.6892	4.0000e-005	0.0000	1.6901
<b>Total</b>	<b>1.7800e-003</b>	<b>0.0425</b>	<b>0.0133</b>	<b>1.1000e-004</b>	<b>3.6400e-003</b>	<b>8.0000e-005</b>	<b>3.7300e-003</b>	<b>9.8000e-004</b>	<b>8.0000e-005</b>	<b>1.0600e-003</b>	<b>0.0000</b>	<b>10.6161</b>	<b>10.6161</b>	<b>6.7000e-004</b>	<b>0.0000</b>	<b>10.6329</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					0.1149	0.0000	0.1149	0.0590	0.0000	0.0590	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0341	0.3650	0.2673	5.2000e-004		0.0165	0.0165		0.0152	0.0152	0.0000	45.5958	45.5958	0.0148	0.0000	45.9645
<b>Total</b>	<b>0.0341</b>	<b>0.3650</b>	<b>0.2673</b>	<b>5.2000e-004</b>	<b>0.1149</b>	<b>0.0165</b>	<b>0.1314</b>	<b>0.0590</b>	<b>0.0152</b>	<b>0.0741</b>	<b>0.0000</b>	<b>45.5958</b>	<b>45.5958</b>	<b>0.0148</b>	<b>0.0000</b>	<b>45.9645</b>

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**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0300e-003	0.0420	7.9200e-003	9.0000e-005	1.5700e-003	7.0000e-005	1.6400e-003	4.3000e-004	7.0000e-005	5.0000e-004	0.0000	8.9270	8.9270	6.3000e-004	0.0000	8.9428
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	7.5000e-004	5.0000e-004	5.4100e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0900e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6892	1.6892	4.0000e-005	0.0000	1.6901
<b>Total</b>	<b>1.7800e-003</b>	<b>0.0425</b>	<b>0.0133</b>	<b>1.1000e-004</b>	<b>3.6400e-003</b>	<b>8.0000e-005</b>	<b>3.7300e-003</b>	<b>9.8000e-004</b>	<b>8.0000e-005</b>	<b>1.0600e-003</b>	<b>0.0000</b>	<b>10.6161</b>	<b>10.6161</b>	<b>6.7000e-004</b>	<b>0.0000</b>	<b>10.6329</b>

**3.5 Building Construction - 2022**

**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	0.1015	0.9291	0.9736	1.6000e-003		0.0481	0.0481		0.0453	0.0453	0.0000	137.8765	137.8765	0.0330	0.0000	138.7023
<b>Total</b>	<b>0.1015</b>	<b>0.9291</b>	<b>0.9736</b>	<b>1.6000e-003</b>		<b>0.0481</b>	<b>0.0481</b>		<b>0.0453</b>	<b>0.0453</b>	<b>0.0000</b>	<b>137.8765</b>	<b>137.8765</b>	<b>0.0330</b>	<b>0.0000</b>	<b>138.7023</b>

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**3.5 Building Construction - 2022**

**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	5.6400e-003	0.1883	0.0467	5.1000e-004	0.0125	3.8000e-004	0.0129	3.6100e-003	3.6000e-004	3.9700e-003	0.0000	48.8949	48.8949	2.3200e-003	0.0000	48.9529
Worker	0.0194	0.0129	0.1398	4.8000e-004	0.0536	3.4000e-004	0.0539	0.0143	3.2000e-004	0.0146	0.0000	43.6486	43.6486	9.1000e-004	0.0000	43.6714
<b>Total</b>	<b>0.0250</b>	<b>0.2012</b>	<b>0.1865</b>	<b>9.9000e-004</b>	<b>0.0661</b>	<b>7.2000e-004</b>	<b>0.0668</b>	<b>0.0179</b>	<b>6.8000e-004</b>	<b>0.0185</b>	<b>0.0000</b>	<b>92.5435</b>	<b>92.5435</b>	<b>3.2300e-003</b>	<b>0.0000</b>	<b>92.6243</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	0.1015	0.9291	0.9736	1.6000e-003		0.0481	0.0481		0.0453	0.0453	0.0000	137.8764	137.8764	0.0330	0.0000	138.7021
<b>Total</b>	<b>0.1015</b>	<b>0.9291</b>	<b>0.9736</b>	<b>1.6000e-003</b>		<b>0.0481</b>	<b>0.0481</b>		<b>0.0453</b>	<b>0.0453</b>	<b>0.0000</b>	<b>137.8764</b>	<b>137.8764</b>	<b>0.0330</b>	<b>0.0000</b>	<b>138.7021</b>

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**3.5 Building Construction - 2022**

**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	5.6400e-003	0.1883	0.0467	5.1000e-004	0.0125	3.8000e-004	0.0129	3.6100e-003	3.6000e-004	3.9700e-003	0.0000	48.8949	48.8949	2.3200e-003	0.0000	48.9529
Worker	0.0194	0.0129	0.1398	4.8000e-004	0.0536	3.4000e-004	0.0539	0.0143	3.2000e-004	0.0146	0.0000	43.6486	43.6486	9.1000e-004	0.0000	43.6714
<b>Total</b>	<b>0.0250</b>	<b>0.2012</b>	<b>0.1865</b>	<b>9.9000e-004</b>	<b>0.0661</b>	<b>7.2000e-004</b>	<b>0.0668</b>	<b>0.0179</b>	<b>6.8000e-004</b>	<b>0.0185</b>	<b>0.0000</b>	<b>92.5435</b>	<b>92.5435</b>	<b>3.2300e-003</b>	<b>0.0000</b>	<b>92.6243</b>

**3.5 Building Construction - 2023**

**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	0.1109	1.0141	1.1452	1.9000e-003		0.0493	0.0493		0.0464	0.0464	0.0000	163.4224	163.4224	0.0389	0.0000	164.3942
<b>Total</b>	<b>0.1109</b>	<b>1.0141</b>	<b>1.1452</b>	<b>1.9000e-003</b>		<b>0.0493</b>	<b>0.0493</b>		<b>0.0464</b>	<b>0.0464</b>	<b>0.0000</b>	<b>163.4224</b>	<b>163.4224</b>	<b>0.0389</b>	<b>0.0000</b>	<b>164.3942</b>

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**3.5 Building Construction - 2023**

**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	5.0100e-003	0.1721	0.0495	5.9000e-004	0.0148	2.0000e-004	0.0150	4.2800e-003	1.9000e-004	4.4700e-003	0.0000	56.3107	56.3107	2.3400e-003	0.0000	56.3692
Worker	0.0215	0.0137	0.1524	5.5000e-004	0.0635	4.0000e-004	0.0639	0.0169	3.7000e-004	0.0173	0.0000	49.7375	49.7375	9.7000e-004	0.0000	49.7617
<b>Total</b>	<b>0.0265</b>	<b>0.1858</b>	<b>0.2019</b>	<b>1.1400e-003</b>	<b>0.0783</b>	<b>6.0000e-004</b>	<b>0.0789</b>	<b>0.0212</b>	<b>5.6000e-004</b>	<b>0.0217</b>	<b>0.0000</b>	<b>106.0481</b>	<b>106.0481</b>	<b>3.3100e-003</b>	<b>0.0000</b>	<b>106.1309</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	0.1109	1.0141	1.1452	1.9000e-003		0.0493	0.0493		0.0464	0.0464	0.0000	163.4222	163.4222	0.0389	0.0000	164.3940
<b>Total</b>	<b>0.1109</b>	<b>1.0141</b>	<b>1.1452</b>	<b>1.9000e-003</b>		<b>0.0493</b>	<b>0.0493</b>		<b>0.0464</b>	<b>0.0464</b>	<b>0.0000</b>	<b>163.4222</b>	<b>163.4222</b>	<b>0.0389</b>	<b>0.0000</b>	<b>164.3940</b>

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**3.5 Building Construction - 2023**

**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	5.0100e-003	0.1721	0.0495	5.9000e-004	0.0148	2.0000e-004	0.0150	4.2800e-003	1.9000e-004	4.4700e-003	0.0000	56.3107	56.3107	2.3400e-003	0.0000	56.3692
Worker	0.0215	0.0137	0.1524	5.5000e-004	0.0635	4.0000e-004	0.0639	0.0169	3.7000e-004	0.0173	0.0000	49.7375	49.7375	9.7000e-004	0.0000	49.7617
<b>Total</b>	<b>0.0265</b>	<b>0.1858</b>	<b>0.2019</b>	<b>1.1400e-003</b>	<b>0.0783</b>	<b>6.0000e-004</b>	<b>0.0789</b>	<b>0.0212</b>	<b>5.6000e-004</b>	<b>0.0217</b>	<b>0.0000</b>	<b>106.0481</b>	<b>106.0481</b>	<b>3.3100e-003</b>	<b>0.0000</b>	<b>106.1309</b>

**3.6 Paving - 2022**

**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	8.2700e-003	0.0834	0.1094	1.7000e-004		4.2600e-003	4.2600e-003		3.9200e-003	3.9200e-003	0.0000	15.0207	15.0207	4.8600e-003	0.0000	15.1421
Paving	4.4400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0127</b>	<b>0.0834</b>	<b>0.1094</b>	<b>1.7000e-004</b>		<b>4.2600e-003</b>	<b>4.2600e-003</b>		<b>3.9200e-003</b>	<b>3.9200e-003</b>	<b>0.0000</b>	<b>15.0207</b>	<b>15.0207</b>	<b>4.8600e-003</b>	<b>0.0000</b>	<b>15.1421</b>

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**3.6 Paving - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.1000e-004	2.3200e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7239	0.7239	2.0000e-005	0.0000	0.7243
<b>Total</b>	<b>3.2000e-004</b>	<b>2.1000e-004</b>	<b>2.3200e-003</b>	<b>1.0000e-005</b>	<b>8.9000e-004</b>	<b>1.0000e-005</b>	<b>8.9000e-004</b>	<b>2.4000e-004</b>	<b>1.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.7239</b>	<b>0.7239</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.7243</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	8.2700e-003	0.0834	0.1094	1.7000e-004		4.2600e-003	4.2600e-003		3.9200e-003	3.9200e-003	0.0000	15.0207	15.0207	4.8600e-003	0.0000	15.1421
Paving	4.4400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0127</b>	<b>0.0834</b>	<b>0.1094</b>	<b>1.7000e-004</b>		<b>4.2600e-003</b>	<b>4.2600e-003</b>		<b>3.9200e-003</b>	<b>3.9200e-003</b>	<b>0.0000</b>	<b>15.0207</b>	<b>15.0207</b>	<b>4.8600e-003</b>	<b>0.0000</b>	<b>15.1421</b>

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**3.6 Paving - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.1000e-004	2.3200e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7239	0.7239	2.0000e-005	0.0000	0.7243
<b>Total</b>	<b>3.2000e-004</b>	<b>2.1000e-004</b>	<b>2.3200e-003</b>	<b>1.0000e-005</b>	<b>8.9000e-004</b>	<b>1.0000e-005</b>	<b>8.9000e-004</b>	<b>2.4000e-004</b>	<b>1.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.7239</b>	<b>0.7239</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.7243</b>

**3.7 Architectural Coating - 2022**

**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	0.2282					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0768	0.0988	1.6000e-004		4.4500e-003	4.4500e-003		4.4500e-003	4.4500e-003	0.0000	13.9152	13.9152	9.1000e-004	0.0000	13.9379
<b>Total</b>	<b>0.2393</b>	<b>0.0768</b>	<b>0.0988</b>	<b>1.6000e-004</b>		<b>4.4500e-003</b>	<b>4.4500e-003</b>		<b>4.4500e-003</b>	<b>4.4500e-003</b>	<b>0.0000</b>	<b>13.9152</b>	<b>13.9152</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>13.9379</b>

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**3.7 Architectural Coating - 2022**

**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	3.5900e-003	2.3800e-003	0.0258	9.0000e-005	9.9000e-003	6.0000e-005	9.9700e-003	2.6400e-003	6.0000e-005	2.6900e-003	0.0000	8.0663	8.0663	1.7000e-004	0.0000	8.0705
<b>Total</b>	<b>3.5900e-003</b>	<b>2.3800e-003</b>	<b>0.0258</b>	<b>9.0000e-005</b>	<b>9.9000e-003</b>	<b>6.0000e-005</b>	<b>9.9700e-003</b>	<b>2.6400e-003</b>	<b>6.0000e-005</b>	<b>2.6900e-003</b>	<b>0.0000</b>	<b>8.0663</b>	<b>8.0663</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>8.0705</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	0.2282					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0768	0.0988	1.6000e-004		4.4500e-003	4.4500e-003		4.4500e-003	4.4500e-003	0.0000	13.9152	13.9152	9.1000e-004	0.0000	13.9379
<b>Total</b>	<b>0.2393</b>	<b>0.0768</b>	<b>0.0988</b>	<b>1.6000e-004</b>		<b>4.4500e-003</b>	<b>4.4500e-003</b>		<b>4.4500e-003</b>	<b>4.4500e-003</b>	<b>0.0000</b>	<b>13.9152</b>	<b>13.9152</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>13.9379</b>

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**3.7 Architectural Coating - 2022**

**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	3.5900e-003	2.3800e-003	0.0258	9.0000e-005	9.9000e-003	6.0000e-005	9.9700e-003	2.6400e-003	6.0000e-005	2.6900e-003	0.0000	8.0663	8.0663	1.7000e-004	0.0000	8.0705
<b>Total</b>	<b>3.5900e-003</b>	<b>2.3800e-003</b>	<b>0.0258</b>	<b>9.0000e-005</b>	<b>9.9000e-003</b>	<b>6.0000e-005</b>	<b>9.9700e-003</b>	<b>2.6400e-003</b>	<b>6.0000e-005</b>	<b>2.6900e-003</b>	<b>0.0000</b>	<b>8.0663</b>	<b>8.0663</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>8.0705</b>

**3.7 Architectural Coating - 2023**

**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	0.3161					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0145	0.0984	0.1367	2.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	19.2771	19.2771	1.1500e-003	0.0000	19.3059
<b>Total</b>	<b>0.3305</b>	<b>0.0984</b>	<b>0.1367</b>	<b>2.2000e-004</b>		<b>5.3500e-003</b>	<b>5.3500e-003</b>		<b>5.3500e-003</b>	<b>5.3500e-003</b>	<b>0.0000</b>	<b>19.2771</b>	<b>19.2771</b>	<b>1.1500e-003</b>	<b>0.0000</b>	<b>19.3059</b>

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**3.7 Architectural Coating - 2023**

**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	4.6500e-003	2.9600e-003	0.0329	1.2000e-004	0.0137	9.0000e-005	0.0138	3.6500e-003	8.0000e-005	3.7300e-003	0.0000	10.7464	10.7464	2.1000e-004	0.0000	10.7517
<b>Total</b>	<b>4.6500e-003</b>	<b>2.9600e-003</b>	<b>0.0329</b>	<b>1.2000e-004</b>	<b>0.0137</b>	<b>9.0000e-005</b>	<b>0.0138</b>	<b>3.6500e-003</b>	<b>8.0000e-005</b>	<b>3.7300e-003</b>	<b>0.0000</b>	<b>10.7464</b>	<b>10.7464</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>10.7517</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	0.3161					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0145	0.0984	0.1367	2.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	19.2770	19.2770	1.1500e-003	0.0000	19.3059
<b>Total</b>	<b>0.3305</b>	<b>0.0984</b>	<b>0.1367</b>	<b>2.2000e-004</b>		<b>5.3500e-003</b>	<b>5.3500e-003</b>		<b>5.3500e-003</b>	<b>5.3500e-003</b>	<b>0.0000</b>	<b>19.2770</b>	<b>19.2770</b>	<b>1.1500e-003</b>	<b>0.0000</b>	<b>19.3059</b>

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**3.7 Architectural Coating - 2023**

**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	4.6500e-003	2.9600e-003	0.0329	1.2000e-004	0.0137	9.0000e-005	0.0138	3.6500e-003	8.0000e-005	3.7300e-003	0.0000	10.7464	10.7464	2.1000e-004	0.0000	10.7517
<b>Total</b>	<b>4.6500e-003</b>	<b>2.9600e-003</b>	<b>0.0329</b>	<b>1.2000e-004</b>	<b>0.0137</b>	<b>9.0000e-005</b>	<b>0.0138</b>	<b>3.6500e-003</b>	<b>8.0000e-005</b>	<b>3.7300e-003</b>	<b>0.0000</b>	<b>10.7464</b>	<b>10.7464</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>10.7517</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network

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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	0.0881	0.3865	0.9741	3.5700e-003	0.3178	2.9400e-003	0.3207	0.0853	2.7400e-003	0.0880	0.0000	328.2344	328.2344	0.0116	0.0000	328.5236
Unmitigated	0.0903	0.4000	1.0260	3.8200e-003	0.3413	3.1300e-003	0.3445	0.0916	2.9200e-003	0.0945	0.0000	350.6061	350.6061	0.0122	0.0000	350.9105

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	397.12	397.12	397.12	917,191	853,905
Parking Lot	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	397.12	397.12	397.12	917,191	853,905

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Parking Lot	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	37.5169	37.5169	4.2200e-003	8.7000e-004	37.8828
NaturalGas Mitigated	3.2500e-003	0.0278	0.0118	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.1599	32.1599	6.2000e-004	5.9000e-004	32.3510
NaturalGas Unmitigated	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	33.6555	33.6555	6.5000e-004	6.2000e-004	33.8555

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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					
Apartments Mid Rise	630680	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	33.6555	33.6555	6.5000e-004	6.2000e-004	33.8555
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
<b>Total</b>		<b>3.4000e-003</b>	<b>0.0291</b>	<b>0.0124</b>	<b>1.9000e-004</b>		<b>2.3500e-003</b>	<b>2.3500e-003</b>		<b>2.3500e-003</b>	<b>2.3500e-003</b>	<b>0.0000</b>	<b>33.6555</b>	<b>33.6555</b>	<b>6.5000e-004</b>	<b>6.2000e-004</b>	<b>33.8555</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					
Apartments Mid Rise	602654	3.2500e-003	0.0278	0.0118	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.1599	32.1599	6.2000e-004	5.9000e-004	32.3510
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
<b>Total</b>		<b>3.2500e-003</b>	<b>0.0278</b>	<b>0.0118</b>	<b>1.8000e-004</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>32.1599</b>	<b>32.1599</b>	<b>6.2000e-004</b>	<b>5.9000e-004</b>	<b>32.3510</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			
Apartments Mid Rise	301370	35.2260	3.9600e-003	8.2000e-004	35.5695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	19600	2.2910	2.6000e-004	5.0000e-005	2.3133
<b>Total</b>		<b>37.5169</b>	<b>4.2200e-003</b>	<b>8.7000e-004</b>	<b>37.8828</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

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**6.1 Mitigation Measures Area**

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive 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	0.3655	6.2700e-003	0.5443	3.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	0.8895	0.8895	8.6000e-004	0.0000	0.9111
Unmitigated	0.5339	0.0101	0.7762	4.9000e-004		0.0362	0.0362		0.0362	0.0362	3.3281	2.2565	5.5845	6.2100e-003	2.2000e-004	5.8049

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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	0.0544					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2945					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1684	3.8800e-003	0.2319	4.6000e-004		0.0332	0.0332		0.0332	0.0332	3.3281	1.3670	4.6950	5.3500e-003	2.2000e-004	4.8938
Landscaping	0.0165	6.2700e-003	0.5443	3.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	0.8895	0.8895	8.6000e-004	0.0000	0.9111
<b>Total</b>	<b>0.5339</b>	<b>0.0102</b>	<b>0.7762</b>	<b>4.9000e-004</b>		<b>0.0362</b>	<b>0.0362</b>		<b>0.0362</b>	<b>0.0362</b>	<b>3.3281</b>	<b>2.2565</b>	<b>5.5845</b>	<b>6.2100e-003</b>	<b>2.2000e-004</b>	<b>5.8049</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	0.0544					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2945					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0165	6.2700e-003	0.5443	3.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	0.8895	0.8895	8.6000e-004	0.0000	0.9111
<b>Total</b>	<b>0.3655</b>	<b>6.2700e-003</b>	<b>0.5443</b>	<b>3.0000e-005</b>		<b>3.0100e-003</b>	<b>3.0100e-003</b>		<b>3.0100e-003</b>	<b>3.0100e-003</b>	<b>0.0000</b>	<b>0.8895</b>	<b>0.8895</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>0.9111</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

Royal Oaks Village - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.4356	0.1244	3.0000e-003	8.4391
Unmitigated	5.7438	0.1555	3.7600e-003	10.7502

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.75624 / 2.9985	5.7438	0.1555	3.7600e-003	10.7502
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>5.7438</b>	<b>0.1555</b>	<b>3.7600e-003</b>	<b>10.7502</b>

Royal Oaks Village - Bay Area AQMD Air District, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	3.805 / 2.009	4.4356	0.1244	3.0000e-003	8.4391
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>4.4356</b>	<b>0.1244</b>	<b>3.0000e-003</b>	<b>8.4391</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Royal Oaks Village - Bay Area AQMD Air District, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.8164	0.4028	0.0000	16.8874
Unmitigated	6.8164	0.4028	0.0000	16.8874

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	33.58	6.8164	0.4028	0.0000	16.8874
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>6.8164</b>	<b>0.4028</b>	<b>0.0000</b>	<b>16.8874</b>

Royal Oaks Village - Bay Area AQMD Air District, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	33.58	6.8164	0.4028	0.0000	16.8874
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>6.8164</b>	<b>0.4028</b>	<b>0.0000</b>	<b>16.8874</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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Royal Oaks Village - Bay Area AQMD Air District, Annual

**11.0 Vegetation**

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Royal Oaks Village - Bay Area AQMD Air District, Summer

**Royal Oaks Village**  
**Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	140.00	Space	1.34	56,000.00	0
Apartment Mid Rise	73.00	Dwelling Unit	2.87	73,000.00	209
Other Asphalt Surfaces	89.50	1000sqft	2.05	89,500.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2023
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	257.69	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Royal Oaks Village - Bay Area AQMD Air District, Summer

Project Characteristics - CO2 intensity factor updated per PG&E's RPS projections.

Land Use - Lot acreages updated per site plan.

Construction Phase - Construction phase timing based on AQ Questionnaire.

Trips and VMT - Site prep and grading phase haul trip lengths adjusted per AQ Questionnaire.

Demolition -

Grading -

Vehicle Trips - Trip generation updated to be consistent with project-specific traffic report.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Title 24 exceedance applied to reflect to compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy per AQ Questionnaire and compliance with CalGreen Code

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	35.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	PhaseEndDate	5/22/2023	7/31/2023
tblConstructionPhase	PhaseEndDate	3/27/2023	7/17/2023
tblConstructionPhase	PhaseEndDate	3/28/2022	3/14/2022
tblConstructionPhase	PhaseEndDate	5/9/2022	6/27/2022
tblConstructionPhase	PhaseEndDate	4/24/2023	7/18/2022
tblConstructionPhase	PhaseEndDate	4/11/2022	5/9/2022
tblConstructionPhase	PhaseStartDate	4/25/2023	8/2/2022
tblConstructionPhase	PhaseStartDate	5/10/2022	7/19/2022

## Royal Oaks Village - Bay Area AQMD Air District, Summer

tblConstructionPhase	PhaseStartDate	4/12/2022	5/10/2022
tblConstructionPhase	PhaseStartDate	3/28/2023	6/28/2022
tblConstructionPhase	PhaseStartDate	3/29/2022	3/15/2022
tblGrading	MaterialExported	0.00	300.00
tblGrading	MaterialImported	0.00	4,929.00
tblLandUse	LotAcreage	1.26	1.34
tblLandUse	LotAcreage	1.92	2.87
tblProjectCharacteristics	CO2IntensityFactor	641.35	257.69
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	WD_TR	6.65	5.44

## 2.0 Emissions Summary

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Royal Oaks Village - Bay Area AQMD Air District, Summer

**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	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365
Energy	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892
Mobile	0.5710	2.1307	5.8706	0.0222	1.9485	0.0172	1.9656	0.5213	0.0160	0.5373		2,246.0053	2,246.0053	0.0742		2,247.8603
<b>Total</b>	<b>32.7072</b>	<b>3.0233</b>	<b>51.6507</b>	<b>0.1000</b>	<b>1.9485</b>	<b>5.6945</b>	<b>7.6429</b>	<b>0.5213</b>	<b>5.6933</b>	<b>6.2146</b>	<b>611.0718</b>	<b>2,730.7104</b>	<b>3,341.7822</b>	<b>0.9249</b>	<b>0.0469</b>	<b>3,378.8860</b>

**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	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585
Energy	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
Mobile	0.5586	2.0615	5.5491	0.0208	1.8140	0.0161	1.8301	0.4853	0.0151	0.5003		2,102.4946	2,102.4946	0.0704		2,104.2533
<b>Total</b>	<b>2.6720</b>	<b>2.2833</b>	<b>11.6612</b>	<b>0.0221</b>	<b>1.8140</b>	<b>0.0619</b>	<b>1.8759</b>	<b>0.4853</b>	<b>0.0608</b>	<b>0.5461</b>	<b>0.0000</b>	<b>2,307.6371</b>	<b>2,307.6371</b>	<b>0.0846</b>	<b>3.5600e-003</b>	<b>2,310.8141</b>

## Royal Oaks Village - 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
Percent Reduction	91.83	24.48	77.42	77.93	6.90	98.91	75.46	6.90	98.93	91.21	100.00	15.49	30.95	90.85	92.41	31.61

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/14/2022	5	10	
2	Site Preparation	Site Preparation	3/15/2022	5/9/2022	5	40	
3	Grading	Grading	5/10/2022	6/27/2022	5	35	
4	Building Construction	Building Construction	7/19/2022	7/17/2023	5	260	
5	Paving	Paving	6/28/2022	7/18/2022	5	15	
6	Architectural Coating	Architectural Coating	8/2/2022	7/31/2023	5	260	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.5

Acres of Paving: 3.39

Residential Indoor: 147,825; Residential Outdoor: 49,275; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,730 (Architectural Coating – sqft)

#### OffRoad Equipment

## Royal Oaks Village - Bay Area AQMD Air District, Summer

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

**Trips and VMT**

Royal Oaks Village - 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	238.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	38.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	616.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	114.00	32.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2022**

**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					5.1433	0.0000	5.1433	0.7787	0.0000	0.7787			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>5.1433</b>	<b>1.2427</b>	<b>6.3859</b>	<b>0.7787</b>	<b>1.1553</b>	<b>1.9340</b>		<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.2 Demolition - 2022**

**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	0.1748	5.7924	1.3046	0.0184	0.4158	0.0169	0.4327	0.1140	0.0162	0.1301		1,971.8975	1,971.8975	0.0970		1,974.3213
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	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
<b>Total</b>	<b>0.2197</b>	<b>5.8177</b>	<b>1.6441</b>	<b>0.0196</b>	<b>0.5391</b>	<b>0.0177</b>	<b>0.5567</b>	<b>0.1466</b>	<b>0.0169</b>	<b>0.1635</b>		<b>2,086.3318</b>	<b>2,086.3318</b>	<b>0.0993</b>		<b>2,088.8152</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	lb/day										lb/day					
Fugitive Dust					5.1433	0.0000	5.1433	0.7787	0.0000	0.7787			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>5.1433</b>	<b>1.2427</b>	<b>6.3859</b>	<b>0.7787</b>	<b>1.1553</b>	<b>1.9340</b>	<b>0.0000</b>	<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.2 Demolition - 2022**

**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	0.1748	5.7924	1.3046	0.0184	0.4158	0.0169	0.4327	0.1140	0.0162	0.1301		1,971.8975	1,971.8975	0.0970		1,974.3213
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	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
<b>Total</b>	<b>0.2197</b>	<b>5.8177</b>	<b>1.6441</b>	<b>0.0196</b>	<b>0.5391</b>	<b>0.0177</b>	<b>0.5567</b>	<b>0.1466</b>	<b>0.0169</b>	<b>0.1635</b>		<b>2,086.3318</b>	<b>2,086.3318</b>	<b>0.0993</b>		<b>2,088.8152</b>

**3.3 Site Preparation - 2022**

**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					18.0671	0.0000	18.0671	9.9308	0.0000	9.9308			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0671</b>	<b>1.6126</b>	<b>19.6797</b>	<b>9.9308</b>	<b>1.4836</b>	<b>11.4144</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.3 Site Preparation - 2022**

**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	3.0900e-003	0.1292	0.0226	2.9000e-004	4.9900e-003	2.3000e-004	5.2200e-003	1.3700e-003	2.2000e-004	1.5900e-003		30.9158	30.9158	2.0800e-003		30.9677
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	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927
<b>Total</b>	<b>0.0570</b>	<b>0.1595</b>	<b>0.4300</b>	<b>1.6700e-003</b>	<b>0.1529</b>	<b>1.1400e-003</b>	<b>0.1540</b>	<b>0.0406</b>	<b>1.0600e-003</b>	<b>0.0417</b>		<b>168.2370</b>	<b>168.2370</b>	<b>4.9400e-003</b>		<b>168.3604</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	lb/day										lb/day					
Fugitive Dust					18.0671	0.0000	18.0671	9.9308	0.0000	9.9308			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0671</b>	<b>1.6126</b>	<b>19.6797</b>	<b>9.9308</b>	<b>1.4836</b>	<b>11.4144</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.3 Site Preparation - 2022**

**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	3.0900e-003	0.1292	0.0226	2.9000e-004	4.9900e-003	2.3000e-004	5.2200e-003	1.3700e-003	2.2000e-004	1.5900e-003		30.9158	30.9158	2.0800e-003		30.9677
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	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927
<b>Total</b>	<b>0.0570</b>	<b>0.1595</b>	<b>0.4300</b>	<b>1.6700e-003</b>	<b>0.1529</b>	<b>1.1400e-003</b>	<b>0.1540</b>	<b>0.0406</b>	<b>1.0600e-003</b>	<b>0.0417</b>		<b>168.2370</b>	<b>168.2370</b>	<b>4.9400e-003</b>		<b>168.3604</b>

**3.4 Grading - 2022**

**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					6.5683	0.0000	6.5683	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>6.5683</b>	<b>0.9409</b>	<b>7.5091</b>	<b>3.3699</b>	<b>0.8656</b>	<b>4.2355</b>		<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.4 Grading - 2022**

**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	0.0573	2.3926	0.4183	5.3500e-003	0.0925	4.1800e-003	0.0967	0.0254	4.0000e-003	0.0294		572.7558	572.7558	0.0385		573.7176
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	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
<b>Total</b>	<b>0.1021</b>	<b>2.4179</b>	<b>0.7578</b>	<b>6.5000e-003</b>	<b>0.2157</b>	<b>4.9400e-003</b>	<b>0.2207</b>	<b>0.0581</b>	<b>4.7000e-003</b>	<b>0.0628</b>		<b>687.1901</b>	<b>687.1901</b>	<b>0.0409</b>		<b>688.2115</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	lb/day										lb/day					
Fugitive Dust					6.5683	0.0000	6.5683	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895,2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>6.5683</b>	<b>0.9409</b>	<b>7.5091</b>	<b>3.3699</b>	<b>0.8656</b>	<b>4.2355</b>	<b>0.0000</b>	<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895,2684</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.4 Grading - 2022**

**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	0.0573	2.3926	0.4183	5.3500e-003	0.0925	4.1800e-003	0.0967	0.0254	4.0000e-003	0.0294		572.7558	572.7558	0.0385		573.7176
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	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
<b>Total</b>	<b>0.1021</b>	<b>2.4179</b>	<b>0.7578</b>	<b>6.5000e-003</b>	<b>0.2157</b>	<b>4.9400e-003</b>	<b>0.2207</b>	<b>0.0581</b>	<b>4.7000e-003</b>	<b>0.0628</b>		<b>687.1901</b>	<b>687.1901</b>	<b>0.0409</b>		<b>688.2115</b>

**3.5 Building Construction - 2022**

**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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.5 Building Construction - 2022**

**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	0.0926	3.1341	0.7334	8.6400e-003	0.2166	6.2100e-003	0.2228	0.0624	5.9400e-003	0.0683		915.6624	915.6624	0.0415		916.6998
Worker	0.3412	0.1921	2.5802	8.7200e-003	0.9365	5.7500e-003	0.9422	0.2484	5.3000e-003	0.2537		869.7007	869.7007	0.0181		870.1538
<b>Total</b>	<b>0.4337</b>	<b>3.3262</b>	<b>3.3136</b>	<b>0.0174</b>	<b>1.1531</b>	<b>0.0120</b>	<b>1.1651</b>	<b>0.3108</b>	<b>0.0112</b>	<b>0.3220</b>		<b>1,785.3631</b>	<b>1,785.3631</b>	<b>0.0596</b>		<b>1,786.8536</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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.5 Building Construction - 2022**

**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	0.0926	3.1341	0.7334	8.6400e-003	0.2166	6.2100e-003	0.2228	0.0624	5.9400e-003	0.0683		915.6624	915.6624	0.0415		916.6998
Worker	0.3412	0.1921	2.5802	8.7200e-003	0.9365	5.7500e-003	0.9422	0.2484	5.3000e-003	0.2537		869.7007	869.7007	0.0181		870.1538
<b>Total</b>	<b>0.4337</b>	<b>3.3262</b>	<b>3.3136</b>	<b>0.0174</b>	<b>1.1531</b>	<b>0.0120</b>	<b>1.1651</b>	<b>0.3108</b>	<b>0.0112</b>	<b>0.3220</b>		<b>1,785.3631</b>	<b>1,785.3631</b>	<b>0.0596</b>		<b>1,786.8536</b>

**3.5 Building Construction - 2023**

**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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.5 Building Construction - 2023**

**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	0.0694	2.4220	0.6602	8.3900e-003	0.2166	2.7600e-003	0.2194	0.0624	2.6300e-003	0.0650		889.9037	889.9037	0.0355		890.7904
Worker	0.3185	0.1728	2.3797	8.3900e-003	0.9365	5.6400e-003	0.9421	0.2484	5.1900e-003	0.2536		836.3596	836.3596	0.0163		836.7664
<b>Total</b>	<b>0.3879</b>	<b>2.5948</b>	<b>3.0399</b>	<b>0.0168</b>	<b>1.1531</b>	<b>8.4000e-003</b>	<b>1.1615</b>	<b>0.3108</b>	<b>7.8200e-003</b>	<b>0.3186</b>		<b>1,726.2633</b>	<b>1,726.2633</b>	<b>0.0517</b>		<b>1,727.5568</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	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.5 Building Construction - 2023**

**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	0.0694	2.4220	0.6602	8.3900e-003	0.2166	2.7600e-003	0.2194	0.0624	2.6300e-003	0.0650		889.9037	889.9037	0.0355		890.7904
Worker	0.3185	0.1728	2.3797	8.3900e-003	0.9365	5.6400e-003	0.9421	0.2484	5.1900e-003	0.2536		836.3596	836.3596	0.0163		836.7664
<b>Total</b>	<b>0.3879</b>	<b>2.5948</b>	<b>3.0399</b>	<b>0.0168</b>	<b>1.1531</b>	<b>8.4000e-003</b>	<b>1.1615</b>	<b>0.3108</b>	<b>7.8200e-003</b>	<b>0.3186</b>		<b>1,726.2633</b>	<b>1,726.2633</b>	<b>0.0517</b>		<b>1,727.5568</b>

**3.6 Paving - 2022**

**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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.5921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6949</b>	<b>11.1249</b>	<b>14.5805</b>	<b>0.0228</b>		<b>0.5679</b>	<b>0.5679</b>		<b>0.5225</b>	<b>0.5225</b>		<b>2,207.6603</b>	<b>2,207.6603</b>	<b>0.7140</b>		<b>2,225.5104</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.6 Paving - 2022**

**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	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
<b>Total</b>	<b>0.0449</b>	<b>0.0253</b>	<b>0.3395</b>	<b>1.1500e-003</b>	<b>0.1232</b>	<b>7.6000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.0000e-004</b>	<b>0.0334</b>		<b>114.4343</b>	<b>114.4343</b>	<b>2.3800e-003</b>		<b>114.4939</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	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.5921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6949</b>	<b>11.1249</b>	<b>14.5805</b>	<b>0.0228</b>		<b>0.5679</b>	<b>0.5679</b>		<b>0.5225</b>	<b>0.5225</b>	<b>0.0000</b>	<b>2,207.6603</b>	<b>2,207.6603</b>	<b>0.7140</b>		<b>2,225.5104</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.6 Paving - 2022**

**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	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
<b>Total</b>	<b>0.0449</b>	<b>0.0253</b>	<b>0.3395</b>	<b>1.1500e-003</b>	<b>0.1232</b>	<b>7.6000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.0000e-004</b>	<b>0.0334</b>		<b>114.4343</b>	<b>114.4343</b>	<b>2.3800e-003</b>		<b>114.4939</b>

**3.7 Architectural Coating - 2022**

**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	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.3909</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2022**

**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	0.0688	0.0388	0.5206	1.7600e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		175.4659	175.4659	3.6600e-003		175.5574
<b>Total</b>	<b>0.0688</b>	<b>0.0388</b>	<b>0.5206</b>	<b>1.7600e-003</b>	<b>0.1889</b>	<b>1.1600e-003</b>	<b>0.1901</b>	<b>0.0501</b>	<b>1.0700e-003</b>	<b>0.0512</b>		<b>175.4659</b>	<b>175.4659</b>	<b>3.6600e-003</b>		<b>175.5574</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	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.3909</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2022**

**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	0.0688	0.0388	0.5206	1.7600e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		175.4659	175.4659	3.6600e-003		175.5574
<b>Total</b>	<b>0.0688</b>	<b>0.0388</b>	<b>0.5206</b>	<b>1.7600e-003</b>	<b>0.1889</b>	<b>1.1600e-003</b>	<b>0.1901</b>	<b>0.0501</b>	<b>1.0700e-003</b>	<b>0.0512</b>		<b>175.4659</b>	<b>175.4659</b>	<b>3.6600e-003</b>		<b>175.5574</b>

**3.7 Architectural Coating - 2023**

**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	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>4.3780</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2023**

**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	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213
<b>Total</b>	<b>0.0643</b>	<b>0.0349</b>	<b>0.4801</b>	<b>1.6900e-003</b>	<b>0.1889</b>	<b>1.1400e-003</b>	<b>0.1901</b>	<b>0.0501</b>	<b>1.0500e-003</b>	<b>0.0512</b>		<b>168.7392</b>	<b>168.7392</b>	<b>3.2800e-003</b>		<b>168.8213</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	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>4.3780</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2023**

**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	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213
<b>Total</b>	<b>0.0643</b>	<b>0.0349</b>	<b>0.4801</b>	<b>1.6900e-003</b>	<b>0.1889</b>	<b>1.1400e-003</b>	<b>0.1901</b>	<b>0.0501</b>	<b>1.0500e-003</b>	<b>0.0512</b>		<b>168.7392</b>	<b>168.7392</b>	<b>3.2800e-003</b>		<b>168.8213</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network

Royal Oaks Village - 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	0.5586	2.0615	5.5491	0.0208	1.8140	0.0161	1.8301	0.4853	0.0151	0.5003		2,102.4946	2,102.4946	0.0704		2,104.2533
Unmitigated	0.5710	2.1307	5.8706	0.0222	1.9485	0.0172	1.9656	0.5213	0.0160	0.5373		2,246.0053	2,246.0053	0.0742		2,247.8603

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	397.12	397.12	397.12	917,191	853,905
Parking Lot	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
<b>Total</b>	<b>397.12</b>	<b>397.12</b>	<b>397.12</b>	<b>917,191</b>	<b>853,905</b>

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Royal Oaks Village - Bay Area AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Parking Lot	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
NaturalGas Unmitigated	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892

Royal Oaks Village - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1727.89	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
<b>Total</b>		<b>0.0186</b>	<b>0.1592</b>	<b>0.0678</b>	<b>1.0200e-003</b>		<b>0.0129</b>	<b>0.0129</b>		<b>0.0129</b>	<b>0.0129</b>		<b>203.2812</b>	<b>203.2812</b>	<b>3.9000e-003</b>	<b>3.7300e-003</b>	<b>204.4892</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	lb/day										lb/day					
Apartments Mid Rise	1.65111	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
<b>Total</b>		<b>0.0178</b>	<b>0.1522</b>	<b>0.0648</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.2480</b>	<b>194.2480</b>	<b>3.7200e-003</b>	<b>3.5600e-003</b>	<b>195.4023</b>

**6.0 Area Detail**

Royal Oaks Village - Bay Area AQMD Air District, Summer

**6.1 Mitigation Measures Area**

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive 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	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585
Unmitigated	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365

## Royal Oaks Village - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.2982					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	1.6137					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Hearth	30.0220	0.6637	39.6650	0.0764		5.6310	5.6310		5.6310	5.6310	611.0718	270.5294	881.6012	0.8362	0.0432		915.3780
Landscaping	0.1837	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334		10.8945	10.8945	0.0106			11.1585
<b>Total</b>	<b>32.1176</b>	<b>0.7334</b>	<b>45.7123</b>	<b>0.0767</b>		<b>5.6645</b>	<b>5.6645</b>		<b>5.6645</b>	<b>5.6645</b>	<b>611.0718</b>	<b>281.4240</b>	<b>892.4957</b>	<b>0.8468</b>	<b>0.0432</b>		<b>926.5365</b>

Royal Oaks Village - Bay Area AQMD Air District, Summer

**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	lb/day										lb/day					
Architectural Coating	0.2982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1837	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334		10.8945	10.8945	0.0106		11.1585
<b>Total</b>	<b>2.0956</b>	<b>0.0697</b>	<b>6.0474</b>	<b>3.2000e-004</b>		<b>0.0334</b>	<b>0.0334</b>		<b>0.0334</b>	<b>0.0334</b>	<b>0.0000</b>	<b>10.8945</b>	<b>10.8945</b>	<b>0.0106</b>	<b>0.0000</b>	<b>11.1585</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**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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## Royal Oaks Village - Bay Area AQMD Air District, Summer

**10.0 Stationary Equipment**

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**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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Royal Oaks Village - Bay Area AQMD Air District, Winter

**Royal Oaks Village**  
**Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	140.00	Space	1.34	56,000.00	0
Apartments Mid Rise	73.00	Dwelling Unit	2.87	73,000.00	209
Other Asphalt Surfaces	89.50	1000sqft	2.05	89,500.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2023
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	257.69	<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**

Royal Oaks Village - Bay Area AQMD Air District, Winter

Project Characteristics - CO2 intensity factor updated per PG&E's RPS projections.

Land Use - Lot acreages updated per site plan.

Construction Phase - Construction phase timing based on AQ Questionnaire.

Trips and VMT - Site prep and grading phase haul trip lengths adjusted per AQ Questionnaire.

Demolition -

Grading -

Vehicle Trips - Trip generation updated to be consistent with project-specific traffic report.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Title 24 exceedance applied to reflect to compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy per AQ Questionnaire and compliance with CalGreen Code

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	35.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	PhaseEndDate	5/22/2023	7/31/2023
tblConstructionPhase	PhaseEndDate	3/27/2023	7/17/2023
tblConstructionPhase	PhaseEndDate	3/28/2022	3/14/2022
tblConstructionPhase	PhaseEndDate	5/9/2022	6/27/2022
tblConstructionPhase	PhaseEndDate	4/24/2023	7/18/2022
tblConstructionPhase	PhaseEndDate	4/11/2022	5/9/2022
tblConstructionPhase	PhaseStartDate	4/25/2023	8/2/2022
tblConstructionPhase	PhaseStartDate	5/10/2022	7/19/2022

## Royal Oaks Village - Bay Area AQMD Air District, Winter

tblConstructionPhase	PhaseStartDate	4/12/2022	5/10/2022
tblConstructionPhase	PhaseStartDate	3/28/2023	6/28/2022
tblConstructionPhase	PhaseStartDate	3/29/2022	3/15/2022
tblGrading	MaterialExported	0.00	300.00
tblGrading	MaterialImported	0.00	4,929.00
tblLandUse	LotAcreage	1.26	1.34
tblLandUse	LotAcreage	1.92	2.87
tblProjectCharacteristics	CO2IntensityFactor	641.35	257.69
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	WD_TR	6.65	5.44

## 2.0 Emissions Summary

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Royal Oaks Village - 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	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365
Energy	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892
Mobile	0.4914	2.2400	5.8980	0.0208	1.9485	0.0172	1.9657	0.5213	0.0161	0.5374		2,103.4870	2,103.4870	0.0756		2,105.3761
<b>Total</b>	<b>32.6276</b>	<b>3.1326</b>	<b>51.6781</b>	<b>0.0985</b>	<b>1.9485</b>	<b>5.6946</b>	<b>7.6430</b>	<b>0.5213</b>	<b>5.6934</b>	<b>6.2147</b>	<b>611.0718</b>	<b>2,588.1921</b>	<b>3,199.2639</b>	<b>0.9262</b>	<b>0.0469</b>	<b>3,236.4018</b>

**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	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585
Energy	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
Mobile	0.4791	2.1629	5.6119	0.0194	1.8140	0.0162	1.8302	0.4853	0.0151	0.5004		1,968.7945	1,968.7945	0.0719		1,970.5915
<b>Total</b>	<b>2.5925</b>	<b>2.3847</b>	<b>11.7240</b>	<b>0.0207</b>	<b>1.8140</b>	<b>0.0619</b>	<b>1.8759</b>	<b>0.4853</b>	<b>0.0609</b>	<b>0.5462</b>	<b>0.0000</b>	<b>2,173.9370</b>	<b>2,173.9370</b>	<b>0.0862</b>	<b>3.5600e-003</b>	<b>2,177.1523</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	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	92.05	23.87	77.31	78.96	6.90	98.91	75.46	6.90	98.93	91.21	100.00	16.01	32.05	90.70	92.41	32.73

### 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	3/1/2022	3/14/2022	5	10	
2	Site Preparation	Site Preparation	3/15/2022	5/9/2022	5	40	
3	Grading	Grading	5/10/2022	6/27/2022	5	35	
4	Building Construction	Building Construction	7/19/2022	7/17/2023	5	260	
5	Paving	Paving	6/28/2022	7/18/2022	5	15	
6	Architectural Coating	Architectural Coating	8/2/2022	7/31/2023	5	260	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.5

Acres of Paving: 3.39

Residential Indoor: 147,825; Residential Outdoor: 49,275; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,730 (Architectural Coating – sqft)

#### OffRoad Equipment

## Royal Oaks Village - Bay Area AQMD Air District, Winter

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

**Trips and VMT**

Royal Oaks Village - 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	238.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	38.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	616.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	114.00	32.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2022**

**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					5.1433	0.0000	5.1433	0.7787	0.0000	0.7787			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>5.1433</b>	<b>1.2427</b>	<b>6.3859</b>	<b>0.7787</b>	<b>1.1553</b>	<b>1.9340</b>		<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.2 Demolition - 2022**

**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	0.1795	5.9203	1.3974	0.0181	0.4158	0.0172	0.4331	0.1140	0.0165	0.1304		1,938.2376	1,938.2376	0.1015		1,940.7752
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	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
<b>Total</b>	<b>0.2272</b>	<b>5.9515</b>	<b>1.7138</b>	<b>0.0192</b>	<b>0.5391</b>	<b>0.0180</b>	<b>0.5570</b>	<b>0.1466</b>	<b>0.0172</b>	<b>0.1638</b>		<b>2,043.6564</b>	<b>2,043.6564</b>	<b>0.1037</b>		<b>2,046.2494</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	lb/day										lb/day					
Fugitive Dust					5.1433	0.0000	5.1433	0.7787	0.0000	0.7787			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>5.1433</b>	<b>1.2427</b>	<b>6.3859</b>	<b>0.7787</b>	<b>1.1553</b>	<b>1.9340</b>	<b>0.0000</b>	<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.2 Demolition - 2022**

**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	0.1795	5.9203	1.3974	0.0181	0.4158	0.0172	0.4331	0.1140	0.0165	0.1304		1,938.2376	1,938.2376	0.1015		1,940.7752
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	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
<b>Total</b>	<b>0.2272</b>	<b>5.9515</b>	<b>1.7138</b>	<b>0.0192</b>	<b>0.5391</b>	<b>0.0180</b>	<b>0.5570</b>	<b>0.1466</b>	<b>0.0172</b>	<b>0.1638</b>		<b>2,043.6564</b>	<b>2,043.6564</b>	<b>0.1037</b>		<b>2,046.2494</b>

**3.3 Site Preparation - 2022**

**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					18.0671	0.0000	18.0671	9.9308	0.0000	9.9308			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0671</b>	<b>1.6126</b>	<b>19.6797</b>	<b>9.9308</b>	<b>1.4836</b>	<b>11.4144</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.3 Site Preparation - 2022**

**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	3.2900e-003	0.1285	0.0268	2.8000e-004	4.9900e-003	2.4000e-004	5.2300e-003	1.3700e-003	2.3000e-004	1.6000e-003		29.5722	29.5722	2.2600e-003		29.6288
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	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691
<b>Total</b>	<b>0.0605</b>	<b>0.1660</b>	<b>0.4064</b>	<b>1.5500e-003</b>	<b>0.1529</b>	<b>1.1500e-003</b>	<b>0.1540</b>	<b>0.0406</b>	<b>1.0700e-003</b>	<b>0.0417</b>		<b>156.0748</b>	<b>156.0748</b>	<b>4.9200e-003</b>		<b>156.1978</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	lb/day										lb/day					
Fugitive Dust					18.0671	0.0000	18.0671	9.9308	0.0000	9.9308			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0671</b>	<b>1.6126</b>	<b>19.6797</b>	<b>9.9308</b>	<b>1.4836</b>	<b>11.4144</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.3 Site Preparation - 2022**

**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	3.2900e-003	0.1285	0.0268	2.8000e-004	4.9900e-003	2.4000e-004	5.2300e-003	1.3700e-003	2.3000e-004	1.6000e-003		29.5722	29.5722	2.2600e-003		29.6288
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	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691
<b>Total</b>	<b>0.0605</b>	<b>0.1660</b>	<b>0.4064</b>	<b>1.5500e-003</b>	<b>0.1529</b>	<b>1.1500e-003</b>	<b>0.1540</b>	<b>0.0406</b>	<b>1.0700e-003</b>	<b>0.0417</b>		<b>156.0748</b>	<b>156.0748</b>	<b>4.9200e-003</b>		<b>156.1978</b>

**3.4 Grading - 2022**

**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					6.5683	0.0000	6.5683	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>6.5683</b>	<b>0.9409</b>	<b>7.5091</b>	<b>3.3699</b>	<b>0.8656</b>	<b>4.2355</b>		<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.4 Grading - 2022**

**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	0.0609	2.3806	0.4957	5.1200e-003	0.0925	4.4200e-003	0.0969	0.0254	4.2300e-003	0.0296		547.8645	547.8645	0.0419		548.9116
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	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
<b>Total</b>	<b>0.1086</b>	<b>2.4118</b>	<b>0.8121</b>	<b>6.1800e-003</b>	<b>0.2157</b>	<b>5.1800e-003</b>	<b>0.2209</b>	<b>0.0581</b>	<b>4.9300e-003</b>	<b>0.0630</b>		<b>653.2833</b>	<b>653.2833</b>	<b>0.0441</b>		<b>654.3858</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	lb/day										lb/day					
Fugitive Dust					6.5683	0.0000	6.5683	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>6.5683</b>	<b>0.9409</b>	<b>7.5091</b>	<b>3.3699</b>	<b>0.8656</b>	<b>4.2355</b>	<b>0.0000</b>	<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.4 Grading - 2022**

**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	0.0609	2.3806	0.4957	5.1200e-003	0.0925	4.4200e-003	0.0969	0.0254	4.2300e-003	0.0296		547.8645	547.8645	0.0419		548.9116
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	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
<b>Total</b>	<b>0.1086</b>	<b>2.4118</b>	<b>0.8121</b>	<b>6.1800e-003</b>	<b>0.2157</b>	<b>5.1800e-003</b>	<b>0.2209</b>	<b>0.0581</b>	<b>4.9300e-003</b>	<b>0.0630</b>		<b>653.2833</b>	<b>653.2833</b>	<b>0.0441</b>		<b>654.3858</b>

**3.5 Building Construction - 2022**

**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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.5 Building Construction - 2022**

**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	0.0980	3.1577	0.8426	8.4200e-003	0.2166	6.4400e-003	0.2231	0.0624	6.1600e-003	0.0685		892.2845	892.2845	0.0449		893.4058
Worker	0.3624	0.2373	2.4041	8.0400e-003	0.9365	5.7500e-003	0.9422	0.2484	5.3000e-003	0.2537		801.1829	801.1829	0.0169		801.6041
<b>Total</b>	<b>0.4605</b>	<b>3.3950</b>	<b>3.2467</b>	<b>0.0165</b>	<b>1.1531</b>	<b>0.0122</b>	<b>1.1653</b>	<b>0.3108</b>	<b>0.0115</b>	<b>0.3222</b>		<b>1,693.4674</b>	<b>1,693.4674</b>	<b>0.0617</b>		<b>1,695.0099</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	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.5 Building Construction - 2022**

**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	0.0980	3.1577	0.8426	8.4200e-003	0.2166	6.4400e-003	0.2231	0.0624	6.1600e-003	0.0685		892.2845	892.2845	0.0449		893.4058
Worker	0.3624	0.2373	2.4041	8.0400e-003	0.9365	5.7500e-003	0.9422	0.2484	5.3000e-003	0.2537		801.1829	801.1829	0.0169		801.6041
<b>Total</b>	<b>0.4605</b>	<b>3.3950</b>	<b>3.2467</b>	<b>0.0165</b>	<b>1.1531</b>	<b>0.0122</b>	<b>1.1653</b>	<b>0.3108</b>	<b>0.0115</b>	<b>0.3222</b>		<b>1,693.4674</b>	<b>1,693.4674</b>	<b>0.0617</b>		<b>1,695.0099</b>

**3.5 Building Construction - 2023**

**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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.5 Building Construction - 2023**

**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	0.0737	2.4338	0.7482	8.1800e-003	0.2166	2.8800e-003	0.2195	0.0624	2.7500e-003	0.0651		867.4113	867.4113	0.0381		868.3632
Worker	0.3395	0.2133	2.2080	7.7300e-003	0.9365	5.6400e-003	0.9421	0.2484	5.1900e-003	0.2536		770.5011	770.5011	0.0151		770.8780
<b>Total</b>	<b>0.4132</b>	<b>2.6471</b>	<b>2.9562</b>	<b>0.0159</b>	<b>1.1531</b>	<b>8.5200e-003</b>	<b>1.1616</b>	<b>0.3108</b>	<b>7.9400e-003</b>	<b>0.3187</b>		<b>1,637.9124</b>	<b>1,637.9124</b>	<b>0.0532</b>		<b>1,639.2413</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	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.5 Building Construction - 2023**

**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	0.0737	2.4338	0.7482	8.1800e-003	0.2166	2.8800e-003	0.2195	0.0624	2.7500e-003	0.0651		867.4113	867.4113	0.0381		868.3632
Worker	0.3395	0.2133	2.2080	7.7300e-003	0.9365	5.6400e-003	0.9421	0.2484	5.1900e-003	0.2536		770.5011	770.5011	0.0151		770.8780
<b>Total</b>	<b>0.4132</b>	<b>2.6471</b>	<b>2.9562</b>	<b>0.0159</b>	<b>1.1531</b>	<b>8.5200e-003</b>	<b>1.1616</b>	<b>0.3108</b>	<b>7.9400e-003</b>	<b>0.3187</b>		<b>1,637.9124</b>	<b>1,637.9124</b>	<b>0.0532</b>		<b>1,639.2413</b>

**3.6 Paving - 2022**

**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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.5921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6949</b>	<b>11.1249</b>	<b>14.5805</b>	<b>0.0228</b>		<b>0.5679</b>	<b>0.5679</b>		<b>0.5225</b>	<b>0.5225</b>		<b>2,207.6603</b>	<b>2,207.6603</b>	<b>0.7140</b>		<b>2,225.5104</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.6 Paving - 2022**

**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	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
<b>Total</b>	<b>0.0477</b>	<b>0.0312</b>	<b>0.3163</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>7.6000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.0000e-004</b>	<b>0.0334</b>		<b>105.4188</b>	<b>105.4188</b>	<b>2.2200e-003</b>		<b>105.4742</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	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.5921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6949</b>	<b>11.1249</b>	<b>14.5805</b>	<b>0.0228</b>		<b>0.5679</b>	<b>0.5679</b>		<b>0.5225</b>	<b>0.5225</b>	<b>0.0000</b>	<b>2,207.6603</b>	<b>2,207.6603</b>	<b>0.7140</b>		<b>2,225.5104</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.6 Paving - 2022**

**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	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
<b>Total</b>	<b>0.0477</b>	<b>0.0312</b>	<b>0.3163</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>7.6000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.0000e-004</b>	<b>0.0334</b>		<b>105.4188</b>	<b>105.4188</b>	<b>2.2200e-003</b>		<b>105.4742</b>

**3.7 Architectural Coating - 2022**

**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	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.3909</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2022**

**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	0.0731	0.0479	0.4850	1.6200e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		161.6422	161.6422	3.4000e-003		161.7272
<b>Total</b>	<b>0.0731</b>	<b>0.0479</b>	<b>0.4850</b>	<b>1.6200e-003</b>	<b>0.1889</b>	<b>1.1600e-003</b>	<b>0.1901</b>	<b>0.0501</b>	<b>1.0700e-003</b>	<b>0.0512</b>		<b>161.6422</b>	<b>161.6422</b>	<b>3.4000e-003</b>		<b>161.7272</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	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.3909</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2022**

**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	0.0731	0.0479	0.4850	1.6200e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		161.6422	161.6422	3.4000e-003		161.7272
<b>Total</b>	<b>0.0731</b>	<b>0.0479</b>	<b>0.4850</b>	<b>1.6200e-003</b>	<b>0.1889</b>	<b>1.1600e-003</b>	<b>0.1901</b>	<b>0.0501</b>	<b>1.0700e-003</b>	<b>0.0512</b>		<b>161.6422</b>	<b>161.6422</b>	<b>3.4000e-003</b>		<b>161.7272</b>

**3.7 Architectural Coating - 2023**

**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	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>4.3780</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2023**

**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	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280
<b>Total</b>	<b>0.0685</b>	<b>0.0430</b>	<b>0.4455</b>	<b>1.5600e-003</b>	<b>0.1889</b>	<b>1.1400e-003</b>	<b>0.1901</b>	<b>0.0501</b>	<b>1.0500e-003</b>	<b>0.0512</b>		<b>155.4520</b>	<b>155.4520</b>	<b>3.0400e-003</b>		<b>155.5280</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	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>4.3780</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2023**

**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	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280
<b>Total</b>	<b>0.0685</b>	<b>0.0430</b>	<b>0.4455</b>	<b>1.5600e-003</b>	<b>0.1889</b>	<b>1.1400e-003</b>	<b>0.1901</b>	<b>0.0501</b>	<b>1.0500e-003</b>	<b>0.0512</b>		<b>155.4520</b>	<b>155.4520</b>	<b>3.0400e-003</b>		<b>155.5280</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network

Royal Oaks Village - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	0.4791	2.1629	5.6119	0.0194	1.8140	0.0162	1.8302	0.4853	0.0151	0.5004		1,968.7945	1,968.7945	0.0719		1,970.5915
Unmitigated	0.4914	2.2400	5.8980	0.0208	1.9485	0.0172	1.9657	0.5213	0.0161	0.5374		2,103.4870	2,103.4870	0.0756		2,105.3761

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	397.12	397.12	397.12	917,191	853,905
Parking Lot	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	397.12	397.12	397.12	917,191	853,905

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Royal Oaks Village - Bay Area AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Parking Lot	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
NaturalGas Unmitigated	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892

Royal Oaks Village - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1727.89	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
<b>Total</b>		<b>0.0186</b>	<b>0.1592</b>	<b>0.0678</b>	<b>1.0200e-003</b>		<b>0.0129</b>	<b>0.0129</b>		<b>0.0129</b>	<b>0.0129</b>		<b>203.2812</b>	<b>203.2812</b>	<b>3.9000e-003</b>	<b>3.7300e-003</b>	<b>204.4892</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	lb/day										lb/day					
Apartments Mid Rise	1.65111	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
<b>Total</b>		<b>0.0178</b>	<b>0.1522</b>	<b>0.0648</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.2480</b>	<b>194.2480</b>	<b>3.7200e-003</b>	<b>3.5600e-003</b>	<b>195.4023</b>

**6.0 Area Detail**

Royal Oaks Village - Bay Area AQMD Air District, Winter

**6.1 Mitigation Measures Area**

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive 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	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585
Unmitigated	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365

## Royal Oaks Village - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	30.0220	0.6637	39.6650	0.0764		5.6310	5.6310		5.6310	5.6310	611.0718	270.5294	881.6012	0.8362	0.0432	915.3780
Landscaping	0.1837	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334		10.8945	10.8945	0.0106		11.1585
<b>Total</b>	<b>32.1176</b>	<b>0.7334</b>	<b>45.7123</b>	<b>0.0767</b>		<b>5.6645</b>	<b>5.6645</b>		<b>5.6645</b>	<b>5.6645</b>	<b>611.0718</b>	<b>281.4240</b>	<b>892.4957</b>	<b>0.8468</b>	<b>0.0432</b>	<b>926.5365</b>

Royal Oaks Village - Bay Area AQMD Air District, Winter

**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	lb/day										lb/day					
Architectural Coating	0.2982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1837	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334		10.8945	10.8945	0.0106		11.1585
<b>Total</b>	<b>2.0956</b>	<b>0.0697</b>	<b>6.0474</b>	<b>3.2000e-004</b>		<b>0.0334</b>	<b>0.0334</b>		<b>0.0334</b>	<b>0.0334</b>	<b>0.0000</b>	<b>10.8945</b>	<b>10.8945</b>	<b>0.0106</b>	<b>0.0000</b>	<b>11.1585</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**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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## Royal Oaks Village - Bay Area AQMD Air District, Winter

**10.0 Stationary Equipment**

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**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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## Royal Oaks Village Bay Area AQMD Air District, Mitigation Report

### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.56200E-002	1.75140E-001	2.35580E-001	3.90000E-004	9.80000E-003	9.80000E-003	0.00000E+000	3.31923E+001	3.31923E+001	2.06000E-003	0.00000E+000	3.32438E+001
Concrete/Industrial Saws	1.79000E-003	1.40100E-002	1.83200E-002	3.00000E-005	7.50000E-004	7.50000E-004	0.00000E+000	2.68828E+000	2.68828E+000	1.50000E-004	0.00000E+000	2.69195E+000
Cranes	4.11000E-002	4.53210E-001	2.11680E-001	6.60000E-004	1.88700E-002	1.73600E-002	0.00000E+000	5.76664E+001	5.76664E+001	1.86500E-002	0.00000E+000	5.81326E+001
Excavators	6.58000E-003	5.77500E-002	1.05790E-001	1.70000E-004	2.79000E-003	2.57000E-003	0.00000E+000	1.47422E+001	1.47422E+001	4.77000E-003	0.00000E+000	1.48614E+001
Forklifts	4.19600E-002	3.91270E-001	4.48070E-001	6.00000E-004	2.50200E-002	2.30100E-002	0.00000E+000	5.23736E+001	5.23736E+001	1.69400E-002	0.00000E+000	5.27971E+001
Generator Sets	4.12000E-002	3.65680E-001	4.77410E-001	8.60000E-004	1.77800E-002	1.77800E-002	0.00000E+000	7.34770E+001	7.34770E+001	3.35000E-003	0.00000E+000	7.35607E+001
Graders	7.26000E-003	9.20100E-002	3.01300E-002	1.20000E-004	2.93000E-003	2.69000E-003	0.00000E+000	1.01808E+001	1.01808E+001	3.29000E-003	0.00000E+000	1.02631E+001
Pavers	3.10000E-003	3.14800E-002	4.32600E-002	7.00000E-005	1.50000E-003	1.38000E-003	0.00000E+000	6.19505E+000	6.19505E+000	2.00000E-003	0.00000E+000	6.24514E+000
Paving Equipment	2.67000E-003	2.60600E-002	3.81900E-002	6.00000E-005	1.27000E-003	1.17000E-003	0.00000E+000	5.36784E+000	5.36784E+000	1.74000E-003	0.00000E+000	5.41124E+000
Rollers	2.49000E-003	2.58900E-002	2.79100E-002	4.00000E-005	1.49000E-003	1.37000E-003	0.00000E+000	3.45779E+000	3.45779E+000	1.12000E-003	0.00000E+000	3.48574E+000
Rubber Tired Dozers	7.32500E-002	7.69440E-001	3.13420E-001	7.50000E-004	3.65200E-002	3.36000E-002	0.00000E+000	6.56490E+001	6.56490E+001	2.12300E-002	0.00000E+000	6.61798E+001
Tractors/Loaders/Backhoes	7.55600E-002	7.67930E-001	1.05900E+000	1.47000E-003	4.00500E-002	3.68400E-002	0.00000E+000	1.29523E+002	1.29523E+002	4.18900E-002	0.00000E+000	1.30570E+002
Welders	3.44100E-002	1.87190E-001	2.19200E-001	3.30000E-004	7.69000E-003	7.69000E-003	0.00000E+000	2.44687E+001	2.44687E+001	2.79000E-003	0.00000E+000	2.45384E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	2.56200E-002	1.75140E-001	2.35580E-001	3.90000E-004	9.80000E-003	9.80000E-003	0.00000E+000	3.31923E+001	3.31923E+001	2.06000E-003	0.00000E+000	3.32437E+001
Concrete/Industrial Saws	1.79000E-003	1.40100E-002	1.83200E-002	3.00000E-005	7.50000E-004	7.50000E-004	0.00000E+000	2.68828E+000	2.68828E+000	1.50000E-004	0.00000E+000	2.69194E+000
Cranes	4.11000E-002	4.53210E-001	2.11680E-001	6.60000E-004	1.88700E-002	1.73600E-002	0.00000E+000	5.76663E+001	5.76663E+001	1.86500E-002	0.00000E+000	5.81325E+001
Excavators	6.58000E-003	5.77500E-002	1.05790E-001	1.70000E-004	2.79000E-003	2.57000E-003	0.00000E+000	1.47422E+001	1.47422E+001	4.77000E-003	0.00000E+000	1.48614E+001
Forklifts	4.19600E-002	3.91270E-001	4.48070E-001	6.00000E-004	2.50200E-002	2.30100E-002	0.00000E+000	5.23736E+001	5.23736E+001	1.69400E-002	0.00000E+000	5.27970E+001
Generator Sets	4.12000E-002	3.65680E-001	4.77410E-001	8.60000E-004	1.77800E-002	1.77800E-002	0.00000E+000	7.34769E+001	7.34769E+001	3.35000E-003	0.00000E+000	7.35607E+001
Graders	7.26000E-003	9.20100E-002	3.01300E-002	1.20000E-004	2.93000E-003	2.69000E-003	0.00000E+000	1.01808E+001	1.01808E+001	3.29000E-003	0.00000E+000	1.02631E+001
Pavers	3.10000E-003	3.14800E-002	4.32600E-002	7.00000E-005	1.50000E-003	1.38000E-003	0.00000E+000	6.19504E+000	6.19504E+000	2.00000E-003	0.00000E+000	6.24513E+000
Paving Equipment	2.67000E-003	2.60600E-002	3.81900E-002	6.00000E-005	1.27000E-003	1.17000E-003	0.00000E+000	5.36783E+000	5.36783E+000	1.74000E-003	0.00000E+000	5.41123E+000
Rollers	2.49000E-003	2.58900E-002	2.79100E-002	4.00000E-005	1.49000E-003	1.37000E-003	0.00000E+000	3.45778E+000	3.45778E+000	1.12000E-003	0.00000E+000	3.48574E+000
Rubber Tired Dozers	7.32500E-002	7.69440E-001	3.13420E-001	7.50000E-004	3.65200E-002	3.36000E-002	0.00000E+000	6.56489E+001	6.56489E+001	2.12300E-002	0.00000E+000	6.61797E+001
Tractors/Loaders/Balckhoes	7.55600E-002	7.67930E-001	1.05900E+000	1.47000E-003	4.00500E-002	3.68400E-002	0.00000E+000	1.29523E+002	1.29523E+002	4.18900E-002	0.00000E+000	1.30570E+002
Welders	3.44100E-002	1.87190E-001	2.19200E-001	3.30000E-004	7.69000E-003	7.69000E-003	0.00000E+000	2.44687E+001	2.44687E+001	2.79000E-003	0.00000E+000	2.45384E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20510E-006	1.20510E-006	0.00000E+000	0.00000E+000	1.20323E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.71478E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21388E-006	1.21388E-006	0.00000E+000	0.00000E+000	1.20414E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.35665E-006	1.35665E-006	0.00000E+000	0.00000E+000	1.34577E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14562E-006	1.14562E-006	0.00000E+000	0.00000E+000	1.13643E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22487E-006	1.22487E-006	0.00000E+000	0.00000E+000	1.22348E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.82244E-007	9.82244E-007	0.00000E+000	0.00000E+000	9.74365E-007
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.61419E-006	1.61419E-006	0.00000E+000	0.00000E+000	1.60125E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.86295E-006	1.86295E-006	0.00000E+000	0.00000E+000	1.84801E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.89202E-006	2.89202E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21860E-006	1.21860E-006	0.00000E+000	0.00000E+000	1.20883E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15810E-006	1.15810E-006	0.00000E+000	0.00000E+000	1.14881E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22606E-006	1.22606E-006	0.00000E+000	0.00000E+000	8.15050E-007

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.02	0.01	0.02	0.01	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.14	0.04	0.14	0.04	0.00	0.00
Demolition	Fugitive Dust	0.03	0.00	0.03	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.11	0.06	0.11	0.06	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.36	0.20	0.36	0.20	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.45	3.36	5.05	6.54	6.07	6.16	0.00	6.38	6.38	4.93	0.00	6.38
Natural Gas	4.41	4.44	4.45	5.26	4.26	4.26	0.00	4.44	4.44	4.62	4.84	4.44
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	23.77	22.78	20.01	20.21	21.50
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
Yes	Land Use	Increase Transit Accessibility	0.15	0.30		
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.05			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.07			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	3.00			
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00			2.00
No	Commute	Provide Ride Sharing Program	5.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.07		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	7.00	
No	Install High Efficiency Lighting		
Yes	On-site Renewable		100.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	33.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

### Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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