

# Appendix B

---

Air Quality and Greenhouse Gas CalEEMod Results

<b>Stripping</b>		<b>Conversion Rates Used</b>	
Depth (inches)	Area (sqft)	1 square foot	144 square inches
4	164421	1 cubic yard	46656 cubic inches
Total (Cubic Yards)	2029.888889		
<b>Excavation</b>			
<b>Structure Foundation</b>			
Depth (inches)	Area (sqft)		
24	42310		
Total (Cubic Yards)	3134.074074		
<b>Pavement Foundation</b>			
Depth (inches)	Area (sqft)		
18	74400		
Total (Cubic Yards)	4133.333333		
Before 5% reduction	9297.296296		
<b>Total Cut Material (Cubic Yards)</b>	<b>8832.431481</b>		

Source: Pacific Crest Engineering, Inc. October 2017. *Preliminary Geotechnical Investigation* .

Rio Ranch Marketplace - Monterey County, Annual

**Rio Ranch Marketplace  
Monterey County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	186.00	Space	1.67	74,400.00	0
City Park	0.35	Acre	0.35	15,400.00	0
Strip Mall	19.31	1000sqft	0.44	19,310.00	0
Supermarket	23.00	1000sqft	0.53	23,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.6	<b>Precipitation Freq (Days)</b>	55
<b>Climate Zone</b>	4			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Rio Ranch Marketplace - Monterey County, Annual

Project Characteristics -

Land Use - City Park represents landscaped area.

Construction Phase - 115 days for architectural coating application is expected.

Grading - 3.8-acre project site

Architectural Coating - Rule 426: 50 g/L flat coating limit

Vehicle Trips - Adjusted per Keith Higgins TIA (2017).

Water And Wastewater - Total water usage = 4.49 AFY.  
Of this, 0.61 AFY used for landscaping.

Mobile Land Use Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblConstructionPhase	NumDays	10.00	115.00
tblConstructionPhase	NumDays	220.00	185.00
tblConstructionPhase	NumDays	6.00	13.00
tblConstructionPhase	NumDays	3.00	7.00
tblEnergyUse	LightingElect	0.35	0.88
tblEnergyUse	LightingElect	5.25	5.38
tblEnergyUse	LightingElect	6.82	7.33
tblEnergyUse	T24E	2.76	2.89
tblEnergyUse	T24E	4.08	4.28
tblEnergyUse	T24NG	2.37	2.38
tblEnergyUse	T24NG	16.69	16.77
tblGrading	AcresOfGrading	6.50	3.80
tblGrading	AcresOfGrading	10.50	3.80
tblGrading	MaterialExported	0.00	8,832.00

Rio Ranch Marketplace - Monterey County, Annual

tblGrading	MaterialImported	0.00	22,483.00
tblLandUse	LandUseSquareFeet	15,246.00	15,400.00
tblVehicleTrips	DV_TP	40.00	18.00
tblVehicleTrips	DV_TP	30.00	18.00
tblVehicleTrips	PB_TP	15.00	7.00
tblVehicleTrips	PB_TP	36.00	7.00
tblVehicleTrips	PR_TP	45.00	75.00
tblVehicleTrips	PR_TP	34.00	75.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	42.04	127.01
tblVehicleTrips	ST_TR	177.59	127.01
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	20.43	91.77
tblVehicleTrips	SU_TR	166.44	91.77
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	44.32	91.77
tblVehicleTrips	WD_TR	102.24	91.77
tblWater	IndoorWaterUseRate	1,430,340.39	0.00
tblWater	IndoorWaterUseRate	2,835,168.94	1,264,302.00
tblWater	OutdoorWaterUseRate	417,018.47	198,769.00
tblWater	OutdoorWaterUseRate	876,660.24	0.00
tblWater	OutdoorWaterUseRate	87,685.64	0.00

**2.0 Emissions Summary**

---



Rio Ranch Marketplace - Monterey County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-30-2018	10-29-2018	1.5294	1.5294
2	10-30-2018	1-29-2019	0.9508	0.9508
3	1-30-2019	4-29-2019	0.9399	0.9399
4	4-30-2019	7-29-2019	0.2058	0.2058
		Highest	1.5294	1.5294

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	0.2014	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0600e-003
Energy	3.0500e-003	0.0277	0.0233	1.7000e-004		2.1000e-003	2.1000e-003		2.1000e-003	2.1000e-003	0.0000	389.9809	389.9809	0.0169	3.9200e-003	391.5700
Mobile	1.7283	7.1631	19.1142	0.0462	6.2054	0.0541	6.2595	1.6010	0.0508	1.6519	0.0000	4,221.6923	4,221.6923	0.2420	0.0000	4,227.7418
Waste						0.0000	0.0000		0.0000	0.0000	30.4547	0.0000	30.4547	1.7998	0.0000	75.4503
Water						0.0000	0.0000		0.0000	0.0000	0.4011	2.1926	2.5937	0.0413	9.9000e-004	3.9221
<b>Total</b>	<b>1.9328</b>	<b>7.1908</b>	<b>19.1404</b>	<b>0.0463</b>	<b>6.2054</b>	<b>0.0562</b>	<b>6.2617</b>	<b>1.6010</b>	<b>0.0530</b>	<b>1.6540</b>	<b>30.8558</b>	<b>4,613.8715</b>	<b>4,644.7273</b>	<b>2.1000</b>	<b>4.9100e-003</b>	<b>4,698.6902</b>

Rio Ranch Marketplace - Monterey County, Annual

**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	0.2014	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0600e-003
Energy	3.0500e-003	0.0277	0.0233	1.7000e-004		2.1000e-003	2.1000e-003		2.1000e-003	2.1000e-003	0.0000	389.9809	389.9809	0.0169	3.9200e-003	391.5700
Mobile	1.6626	6.7462	17.7614	0.0419	5.5849	0.0493	5.6342	1.4409	0.0463	1.4873	0.0000	3,832.8065	3,832.8065	0.2240	0.0000	3,838.4063
Waste						0.0000	0.0000		0.0000	0.0000	30.4547	0.0000	30.4547	1.7998	0.0000	75.4503
Water						0.0000	0.0000		0.0000	0.0000	0.8022	4.3851	5.1873	0.0826	1.9900e-003	7.8441
<b>Total</b>	<b>1.8671</b>	<b>6.7739</b>	<b>17.7876</b>	<b>0.0421</b>	<b>5.5849</b>	<b>0.0514</b>	<b>5.6363</b>	<b>1.4409</b>	<b>0.0485</b>	<b>1.4894</b>	<b>31.2569</b>	<b>4,227.1782</b>	<b>4,258.4351</b>	<b>2.1233</b>	<b>5.9100e-003</b>	<b>4,313.2768</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>3.40</b>	<b>5.80</b>	<b>7.07</b>	<b>9.18</b>	<b>10.00</b>	<b>8.52</b>	<b>9.99</b>	<b>10.00</b>	<b>8.50</b>	<b>9.95</b>	<b>-1.30</b>	<b>8.38</b>	<b>8.32</b>	<b>-1.11</b>	<b>-20.37</b>	<b>8.20</b>

**3.0 Construction Detail**

**Construction Phase**



Rio Ranch Marketplace - Monterey County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/30/2018	8/7/2018	5	7	
2	Grading	Grading	8/8/2018	8/24/2018	5	13	
3	Building Construction	Building Construction	8/25/2018	5/10/2019	5	185	
4	Architectural Coating	Architectural Coating	12/14/2018	5/23/2019	5	115	
5	Paving	Paving	5/10/2019	5/23/2019	5	10	

**Acres of Grading (Site Preparation Phase): 3.8**

**Acres of Grading (Grading Phase): 3.8**

**Acres of Paving: 1.67**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 63,465; Non-Residential Outdoor: 21,155; Striped Parking Area: 4,464 (Architectural Coating – sqft)**

**OffRoad Equipment**

Rio Ranch Marketplace - Monterey County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	1,104.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,810.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	51.00	22.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Rio Ranch Marketplace - Monterey County, Annual

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9600e-003	0.0000	2.9600e-003	3.6000e-004	0.0000	3.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0827	0.0446	9.0000e-005		3.3400e-003	3.3400e-003		3.0700e-003	3.0700e-003	0.0000	7.8376	7.8376	2.4400e-003	0.0000	7.8986
<b>Total</b>	<b>6.6500e-003</b>	<b>0.0827</b>	<b>0.0446</b>	<b>9.0000e-005</b>	<b>2.9600e-003</b>	<b>3.3400e-003</b>	<b>6.3000e-003</b>	<b>3.6000e-004</b>	<b>3.0700e-003</b>	<b>3.4300e-003</b>	<b>0.0000</b>	<b>7.8376</b>	<b>7.8376</b>	<b>2.4400e-003</b>	<b>0.0000</b>	<b>7.8986</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.2 Site Preparation - 2018**

**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	6.0700e-003	0.1923	0.0396	4.6000e-004	9.3500e-003	1.1700e-003	0.0105	2.5700e-003	1.1200e-003	3.6900e-003	0.0000	43.7970	43.7970	1.7400e-003	0.0000	43.8406
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	1.5000e-004	1.5000e-004	1.3000e-003	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2246	0.2246	1.0000e-005	0.0000	0.2249
<b>Total</b>	<b>6.2200e-003</b>	<b>0.1925</b>	<b>0.0409</b>	<b>4.6000e-004</b>	<b>9.5700e-003</b>	<b>1.1700e-003</b>	<b>0.0107</b>	<b>2.6300e-003</b>	<b>1.1200e-003</b>	<b>3.7500e-003</b>	<b>0.0000</b>	<b>44.0216</b>	<b>44.0216</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>44.0655</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					2.9600e-003	0.0000	2.9600e-003	3.6000e-004	0.0000	3.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0827	0.0446	9.0000e-005		3.3400e-003	3.3400e-003		3.0700e-003	3.0700e-003	0.0000	7.8376	7.8376	2.4400e-003	0.0000	7.8986
<b>Total</b>	<b>6.6500e-003</b>	<b>0.0827</b>	<b>0.0446</b>	<b>9.0000e-005</b>	<b>2.9600e-003</b>	<b>3.3400e-003</b>	<b>6.3000e-003</b>	<b>3.6000e-004</b>	<b>3.0700e-003</b>	<b>3.4300e-003</b>	<b>0.0000</b>	<b>7.8376</b>	<b>7.8376</b>	<b>2.4400e-003</b>	<b>0.0000</b>	<b>7.8986</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.2 Site Preparation - 2018**

**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	6.0700e-003	0.1923	0.0396	4.6000e-004	0.0164	1.1700e-003	0.0175	4.2900e-003	1.1200e-003	5.4100e-003	0.0000	43.7970	43.7970	1.7400e-003	0.0000	43.8406
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	1.5000e-004	1.5000e-004	1.3000e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2246	0.2246	1.0000e-005	0.0000	0.2249
<b>Total</b>	<b>6.2200e-003</b>	<b>0.1925</b>	<b>0.0409</b>	<b>4.6000e-004</b>	<b>0.0168</b>	<b>1.1700e-003</b>	<b>0.0180</b>	<b>4.4000e-003</b>	<b>1.1200e-003</b>	<b>5.5200e-003</b>	<b>0.0000</b>	<b>44.0216</b>	<b>44.0216</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>44.0655</b>

**3.3 Grading - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0436	0.0000	0.0436	0.0221	0.0000	0.0221	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.1579	0.0675	1.3000e-004		7.5900e-003	7.5900e-003		6.9900e-003	6.9900e-003	0.0000	12.2502	12.2502	3.8100e-003	0.0000	12.3455
<b>Total</b>	<b>0.0140</b>	<b>0.1579</b>	<b>0.0675</b>	<b>1.3000e-004</b>	<b>0.0436</b>	<b>7.5900e-003</b>	<b>0.0512</b>	<b>0.0221</b>	<b>6.9900e-003</b>	<b>0.0291</b>	<b>0.0000</b>	<b>12.2502</b>	<b>12.2502</b>	<b>3.8100e-003</b>	<b>0.0000</b>	<b>12.3455</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.3 Grading - 2018**

**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	0.0155	0.4896	0.1007	1.1600e-003	0.0238	2.9700e-003	0.0268	6.5400e-003	2.8400e-003	9.3800e-003	0.0000	111.4762	111.4762	4.4300e-003	0.0000	111.5870
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	3.5000e-004	3.4000e-004	3.0300e-003	1.0000e-005	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.5214	0.5214	3.0000e-005	0.0000	0.5221
<b>Total</b>	<b>0.0158</b>	<b>0.4899</b>	<b>0.1037</b>	<b>1.1700e-003</b>	<b>0.0243</b>	<b>2.9700e-003</b>	<b>0.0273</b>	<b>6.6800e-003</b>	<b>2.8400e-003</b>	<b>9.5200e-003</b>	<b>0.0000</b>	<b>111.9976</b>	<b>111.9976</b>	<b>4.4600e-003</b>	<b>0.0000</b>	<b>112.1091</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					0.0436	0.0000	0.0436	0.0221	0.0000	0.0221	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.1579	0.0675	1.3000e-004		7.5900e-003	7.5900e-003		6.9900e-003	6.9900e-003	0.0000	12.2502	12.2502	3.8100e-003	0.0000	12.3455
<b>Total</b>	<b>0.0140</b>	<b>0.1579</b>	<b>0.0675</b>	<b>1.3000e-004</b>	<b>0.0436</b>	<b>7.5900e-003</b>	<b>0.0512</b>	<b>0.0221</b>	<b>6.9900e-003</b>	<b>0.0291</b>	<b>0.0000</b>	<b>12.2502</b>	<b>12.2502</b>	<b>3.8100e-003</b>	<b>0.0000</b>	<b>12.3455</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.3 Grading - 2018**

**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	0.0155	0.4896	0.1007	1.1600e-003	0.0417	2.9700e-003	0.0447	0.0109	2.8400e-003	0.0138	0.0000	111.4762	111.4762	4.4300e-003	0.0000	111.5870
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	3.5000e-004	3.4000e-004	3.0300e-003	1.0000e-005	9.6000e-004	0.0000	9.7000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.5214	0.5214	3.0000e-005	0.0000	0.5221
<b>Total</b>	<b>0.0158</b>	<b>0.4899</b>	<b>0.1037</b>	<b>1.1700e-003</b>	<b>0.0426</b>	<b>2.9700e-003</b>	<b>0.0456</b>	<b>0.0112</b>	<b>2.8400e-003</b>	<b>0.0140</b>	<b>0.0000</b>	<b>111.9976</b>	<b>111.9976</b>	<b>4.4600e-003</b>	<b>0.0000</b>	<b>112.1091</b>

**3.4 Building Construction - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1325	0.9422	0.7152	1.1400e-003		0.0572	0.0572		0.0548	0.0548	0.0000	96.1659	96.1659	0.0207	0.0000	96.6839
<b>Total</b>	<b>0.1325</b>	<b>0.9422</b>	<b>0.7152</b>	<b>1.1400e-003</b>		<b>0.0572</b>	<b>0.0572</b>		<b>0.0548</b>	<b>0.0548</b>	<b>0.0000</b>	<b>96.1659</b>	<b>96.1659</b>	<b>0.0207</b>	<b>0.0000</b>	<b>96.6839</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.4 Building Construction - 2018**

**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	6.3900e-003	0.1438	0.0442	2.9000e-004	6.5900e-003	1.3000e-003	7.8900e-003	1.9000e-003	1.2500e-003	3.1500e-003	0.0000	27.3533	27.3533	1.4300e-003	0.0000	27.3891
Worker	0.0126	0.0122	0.1081	2.1000e-004	0.0184	1.8000e-004	0.0186	4.9000e-003	1.6000e-004	5.0700e-003	0.0000	18.6141	18.6141	9.9000e-004	0.0000	18.6389
<b>Total</b>	<b>0.0189</b>	<b>0.1560</b>	<b>0.1523</b>	<b>5.0000e-004</b>	<b>0.0250</b>	<b>1.4800e-003</b>	<b>0.0265</b>	<b>6.8000e-003</b>	<b>1.4100e-003</b>	<b>8.2200e-003</b>	<b>0.0000</b>	<b>45.9674</b>	<b>45.9674</b>	<b>2.4200e-003</b>	<b>0.0000</b>	<b>46.0280</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	0.1325	0.9422	0.7152	1.1400e-003		0.0572	0.0572		0.0548	0.0548	0.0000	96.1658	96.1658	0.0207	0.0000	96.6837
<b>Total</b>	<b>0.1325</b>	<b>0.9422</b>	<b>0.7152</b>	<b>1.1400e-003</b>		<b>0.0572</b>	<b>0.0572</b>		<b>0.0548</b>	<b>0.0548</b>	<b>0.0000</b>	<b>96.1658</b>	<b>96.1658</b>	<b>0.0207</b>	<b>0.0000</b>	<b>96.6837</b>



Rio Ranch Marketplace - Monterey County, Annual

**3.4 Building Construction - 2018**

**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	6.3900e-003	0.1438	0.0442	2.9000e-004	0.0112	1.3000e-003	0.0125	3.0400e-003	1.2500e-003	4.2900e-003	0.0000	27.3533	27.3533	1.4300e-003	0.0000	27.3891
Worker	0.0126	0.0122	0.1081	2.1000e-004	0.0344	1.8000e-004	0.0346	8.8200e-003	1.6000e-004	8.9800e-003	0.0000	18.6141	18.6141	9.9000e-004	0.0000	18.6389
<b>Total</b>	<b>0.0189</b>	<b>0.1560</b>	<b>0.1523</b>	<b>5.0000e-004</b>	<b>0.0456</b>	<b>1.4800e-003</b>	<b>0.0471</b>	<b>0.0119</b>	<b>1.4100e-003</b>	<b>0.0133</b>	<b>0.0000</b>	<b>45.9674</b>	<b>45.9674</b>	<b>2.4200e-003</b>	<b>0.0000</b>	<b>46.0280</b>

**3.4 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1202	0.8888	0.7170	1.1800e-003		0.0512	0.0512		0.0491	0.0491	0.0000	98.5845	98.5845	0.0205	0.0000	99.0972
<b>Total</b>	<b>0.1202</b>	<b>0.8888</b>	<b>0.7170</b>	<b>1.1800e-003</b>		<b>0.0512</b>	<b>0.0512</b>		<b>0.0491</b>	<b>0.0491</b>	<b>0.0000</b>	<b>98.5845</b>	<b>98.5845</b>	<b>0.0205</b>	<b>0.0000</b>	<b>99.0972</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.4 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7300e-003	0.1403	0.0403	2.9000e-004	6.8100e-003	1.0900e-003	7.9000e-003	1.9700e-003	1.0400e-003	3.0100e-003	0.0000	28.1339	28.1339	1.4000e-003	0.0000	28.1690
Worker	0.0116	0.0110	0.0985	2.1000e-004	0.0191	1.8000e-004	0.0192	5.0600e-003	1.6000e-004	5.2300e-003	0.0000	18.6809	18.6809	9.0000e-004	0.0000	18.7034
<b>Total</b>	<b>0.0173</b>	<b>0.1513</b>	<b>0.1388</b>	<b>5.0000e-004</b>	<b>0.0259</b>	<b>1.2700e-003</b>	<b>0.0271</b>	<b>7.0300e-003</b>	<b>1.2000e-003</b>	<b>8.2400e-003</b>	<b>0.0000</b>	<b>46.8148</b>	<b>46.8148</b>	<b>2.3000e-003</b>	<b>0.0000</b>	<b>46.8724</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	0.1202	0.8888	0.7170	1.1800e-003		0.0512	0.0512		0.0491	0.0491	0.0000	98.5844	98.5844	0.0205	0.0000	99.0971
<b>Total</b>	<b>0.1202</b>	<b>0.8888</b>	<b>0.7170</b>	<b>1.1800e-003</b>		<b>0.0512</b>	<b>0.0512</b>		<b>0.0491</b>	<b>0.0491</b>	<b>0.0000</b>	<b>98.5844</b>	<b>98.5844</b>	<b>0.0205</b>	<b>0.0000</b>	<b>99.0971</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.4 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7300e-003	0.1403	0.0403	2.9000e-004	0.0116	1.0900e-003	0.0127	3.1500e-003	1.0400e-003	4.1900e-003	0.0000	28.1339	28.1339	1.4000e-003	0.0000	28.1690
Worker	0.0116	0.0110	0.0985	2.1000e-004	0.0355	1.8000e-004	0.0357	9.1100e-003	1.6000e-004	9.2700e-003	0.0000	18.6809	18.6809	9.0000e-004	0.0000	18.7034
<b>Total</b>	<b>0.0173</b>	<b>0.1513</b>	<b>0.1388</b>	<b>5.0000e-004</b>	<b>0.0471</b>	<b>1.2700e-003</b>	<b>0.0484</b>	<b>0.0123</b>	<b>1.2000e-003</b>	<b>0.0135</b>	<b>0.0000</b>	<b>46.8148</b>	<b>46.8148</b>	<b>2.3000e-003</b>	<b>0.0000</b>	<b>46.8724</b>

**3.5 Architectural Coating - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7900e-003	0.0120	0.0111	2.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	1.5320	1.5320	1.5000e-004	0.0000	1.5356
<b>Total</b>	<b>0.0136</b>	<b>0.0120</b>	<b>0.0111</b>	<b>2.0000e-005</b>		<b>9.0000e-004</b>	<b>9.0000e-004</b>		<b>9.0000e-004</b>	<b>9.0000e-004</b>	<b>0.0000</b>	<b>1.5320</b>	<b>1.5320</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5356</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.5 Architectural Coating - 2018**

**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	3.1000e-004	2.8000e-003	1.0000e-005	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4813	0.4813	3.0000e-005	0.0000	0.4819
<b>Total</b>	<b>3.2000e-004</b>	<b>3.1000e-004</b>	<b>2.8000e-003</b>	<b>1.0000e-005</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>4.8000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.4813</b>	<b>0.4813</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.4819</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	0.0119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7900e-003	0.0120	0.0111	2.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	1.5320	1.5320	1.5000e-004	0.0000	1.5356
<b>Total</b>	<b>0.0136</b>	<b>0.0120</b>	<b>0.0111</b>	<b>2.0000e-005</b>		<b>9.0000e-004</b>	<b>9.0000e-004</b>		<b>9.0000e-004</b>	<b>9.0000e-004</b>	<b>0.0000</b>	<b>1.5320</b>	<b>1.5320</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5356</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.5 Architectural Coating - 2018**

**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	3.1000e-004	2.8000e-003	1.0000e-005	8.9000e-004	0.0000	8.9000e-004	2.3000e-004	0.0000	2.3000e-004	0.0000	0.4813	0.4813	3.0000e-005	0.0000	0.4819
<b>Total</b>	<b>3.2000e-004</b>	<b>3.1000e-004</b>	<b>2.8000e-003</b>	<b>1.0000e-005</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>8.9000e-004</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>0.4813</b>	<b>0.4813</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.4819</b>

**3.5 Architectural Coating - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0137	0.0945	0.0948	1.5000e-004		6.6300e-003	6.6300e-003		6.6300e-003	6.6300e-003	0.0000	13.1493	13.1493	1.1100e-003	0.0000	13.1770
<b>Total</b>	<b>0.1154</b>	<b>0.0945</b>	<b>0.0948</b>	<b>1.5000e-004</b>		<b>6.6300e-003</b>	<b>6.6300e-003</b>		<b>6.6300e-003</b>	<b>6.6300e-003</b>	<b>0.0000</b>	<b>13.1493</b>	<b>13.1493</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>13.1770</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.5 Architectural Coating - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4900e-003	2.3700e-003	0.0212	4.0000e-005	4.0900e-003	4.0000e-005	4.1300e-003	1.0900e-003	4.0000e-005	1.1200e-003	0.0000	4.0136	4.0136	1.9000e-004	0.0000	4.0185
<b>Total</b>	<b>2.4900e-003</b>	<b>2.3700e-003</b>	<b>0.0212</b>	<b>4.0000e-005</b>	<b>4.0900e-003</b>	<b>4.0000e-005</b>	<b>4.1300e-003</b>	<b>1.0900e-003</b>	<b>4.0000e-005</b>	<b>1.1200e-003</b>	<b>0.0000</b>	<b>4.0136</b>	<b>4.0136</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.0185</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	0.1017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0137	0.0945	0.0948	1.5000e-004		6.6300e-003	6.6300e-003		6.6300e-003	6.6300e-003	0.0000	13.1492	13.1492	1.1100e-003	0.0000	13.1770
<b>Total</b>	<b>0.1154</b>	<b>0.0945</b>	<b>0.0948</b>	<b>1.5000e-004</b>		<b>6.6300e-003</b>	<b>6.6300e-003</b>		<b>6.6300e-003</b>	<b>6.6300e-003</b>	<b>0.0000</b>	<b>13.1492</b>	<b>13.1492</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>13.1770</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.5 Architectural Coating - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4900e-003	2.3700e-003	0.0212	4.0000e-005	7.6300e-003	4.0000e-005	7.6700e-003	1.9600e-003	4.0000e-005	1.9900e-003	0.0000	4.0136	4.0136	1.9000e-004	0.0000	4.0185
<b>Total</b>	<b>2.4900e-003</b>	<b>2.3700e-003</b>	<b>0.0212</b>	<b>4.0000e-005</b>	<b>7.6300e-003</b>	<b>4.0000e-005</b>	<b>7.6700e-003</b>	<b>1.9600e-003</b>	<b>4.0000e-005</b>	<b>1.9900e-003</b>	<b>0.0000</b>	<b>4.0136</b>	<b>4.0136</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.0185</b>

**3.6 Paving - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.2300e-003	0.0628	0.0593	9.0000e-005		3.6500e-003	3.6500e-003		3.3600e-003	3.3600e-003	0.0000	7.9208	7.9208	2.4600e-003	0.0000	7.9823
Paving	2.1900e-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>8.4200e-003</b>	<b>0.0628</b>	<b>0.0593</b>	<b>9.0000e-005</b>		<b>3.6500e-003</b>	<b>3.6500e-003</b>		<b>3.3600e-003</b>	<b>3.3600e-003</b>	<b>0.0000</b>	<b>7.9208</b>	<b>7.9208</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>7.9823</b>

Rio Ranch Marketplace - Monterey County, Annual

**3.6 Paving - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	3.5000e-004	3.0800e-003	1.0000e-005	6.0000e-004	1.0000e-005	6.0000e-004	1.6000e-004	1.0000e-005	1.6000e-004	0.0000	0.5845	0.5845	3.0000e-005	0.0000	0.5852
<b>Total</b>	<b>3.6000e-004</b>	<b>3.5000e-004</b>	<b>3.0800e-003</b>	<b>1.0000e-005</b>	<b>6.0000e-004</b>	<b>1.0000e-005</b>	<b>6.0000e-004</b>	<b>1.6000e-004</b>	<b>1.0000e-005</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.5845</b>	<b>0.5845</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5852</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	6.2300e-003	0.0628	0.0593	9.0000e-005		3.6500e-003	3.6500e-003		3.3600e-003	3.3600e-003	0.0000	7.9208	7.9208	2.4600e-003	0.0000	7.9823
Paving	2.1900e-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>8.4200e-003</b>	<b>0.0628</b>	<b>0.0593</b>	<b>9.0000e-005</b>		<b>3.6500e-003</b>	<b>3.6500e-003</b>		<b>3.3600e-003</b>	<b>3.3600e-003</b>	<b>0.0000</b>	<b>7.9208</b>	<b>7.9208</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>7.9823</b>



Rio Ranch Marketplace - Monterey County, Annual

**3.6 Paving - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	3.5000e-004	3.0800e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.5845	0.5845	3.0000e-005	0.0000	0.5852
<b>Total</b>	<b>3.6000e-004</b>	<b>3.5000e-004</b>	<b>3.0800e-003</b>	<b>1.0000e-005</b>	<b>1.1100e-003</b>	<b>1.0000e-005</b>	<b>1.1200e-003</b>	<b>2.8000e-004</b>	<b>1.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>0.5845</b>	<b>0.5845</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5852</b>

**4.0 Operational Detail - Mobile**

---

**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Rio Ranch Marketplace - Monterey County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6626	6.7462	17.7614	0.0419	5.5849	0.0493	5.6342	1.4409	0.0463	1.4873	0.0000	3,832.8065	3,832.8065	0.2240	0.0000	3,838.4063
Unmitigated	1.7283	7.1631	19.1142	0.0462	6.2054	0.0541	6.2595	1.6010	0.0508	1.6519	0.0000	4,221.6923	4,221.6923	0.2420	0.0000	4,227.7418

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	1,772.08	2,452.56	1772.08	4,151,141	3,736,027
Supermarket	2,110.71	2,921.23	2110.71	4,801,229	4,321,106
Total	3,882.79	5,373.79	3,882.79	8,952,370	8,057,133

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	75	18	7
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	75	18	7

4.4 Fleet Mix

Rio Ranch Marketplace - Monterey County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Parking Lot	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Strip Mall	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Supermarket	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	359.8390	359.8390	0.0163	3.3700e-003	361.2490
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	359.8390	359.8390	0.0163	3.3700e-003	361.2490
NaturalGas Mitigated	3.0500e-003	0.0277	0.0233	1.7000e-004		2.1000e-003	2.1000e-003		2.1000e-003	2.1000e-003	0.0000	30.1419	30.1419	5.8000e-004	5.5000e-004	30.3210
NaturalGas Unmitigated	3.0500e-003	0.0277	0.0233	1.7000e-004		2.1000e-003	2.1000e-003		2.1000e-003	2.1000e-003	0.0000	30.1419	30.1419	5.8000e-004	5.5000e-004	30.3210

Rio Ranch Marketplace - Monterey County, Annual

**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					
City Park	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
Strip Mall	45957.8	2.5000e-004	2.2500e-003	1.8900e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4525	2.4525	5.0000e-005	4.0000e-005	2.4671
Supermarket	518880	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6894	27.6894	5.3000e-004	5.1000e-004	27.8540
<b>Total</b>		<b>3.0500e-003</b>	<b>0.0277</b>	<b>0.0233</b>	<b>1.6000e-004</b>		<b>2.1000e-003</b>	<b>2.1000e-003</b>		<b>2.1000e-003</b>	<b>2.1000e-003</b>	<b>0.0000</b>	<b>30.1419</b>	<b>30.1419</b>	<b>5.8000e-004</b>	<b>5.5000e-004</b>	<b>30.3210</b>

Rio Ranch Marketplace - Monterey County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	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
Strip Mall	45957.8	2.5000e-004	2.2500e-003	1.8900e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4525	2.4525	5.0000e-005	4.0000e-005	2.4671
Supermarket	518880	2.8000e-003	0.0254	0.0214	1.5000e-004		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	27.6894	27.6894	5.3000e-004	5.1000e-004	27.8540
<b>Total</b>		<b>3.0500e-003</b>	<b>0.0277</b>	<b>0.0233</b>	<b>1.6000e-004</b>		<b>2.1000e-003</b>	<b>2.1000e-003</b>		<b>2.1000e-003</b>	<b>2.1000e-003</b>	<b>0.0000</b>	<b>30.1419</b>	<b>30.1419</b>	<b>5.8000e-004</b>	<b>5.5000e-004</b>	<b>30.3210</b>

Rio Ranch Marketplace - Monterey County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	65472	19.0466	8.6000e-004	1.8000e-004	19.1212
Strip Mall	211445	61.5116	2.7800e-003	5.8000e-004	61.7527
Supermarket	960020	279.2808	0.0126	2.6100e-003	280.3751
<b>Total</b>		<b>359.8390</b>	<b>0.0163</b>	<b>3.3700e-003</b>	<b>361.2490</b>

## Rio Ranch Marketplace - Monterey County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	65472	19.0466	8.6000e-004	1.8000e-004	19.1212
Strip Mall	211445	61.5116	2.7800e-003	5.8000e-004	61.7527
Supermarket	960020	279.2808	0.0126	2.6100e-003	280.3751
<b>Total</b>		<b>359.8390</b>	<b>0.0163</b>	<b>3.3700e-003</b>	<b>361.2490</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Rio Ranch Marketplace - Monterey County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	0.2014	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0600e-003
Unmitigated	0.2014	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1702					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0600e-003
<b>Total</b>	<b>0.2015</b>	<b>3.0000e-005</b>	<b>2.9400e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>5.6700e-003</b>	<b>5.6700e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>6.0600e-003</b>



Rio Ranch Marketplace - Monterey County, Annual

**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	0.0310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1702					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0600e-003
<b>Total</b>	<b>0.2015</b>	<b>3.0000e-005</b>	<b>2.9400e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>5.6700e-003</b>	<b>5.6700e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>6.0600e-003</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Rio Ranch Marketplace - Monterey County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.1873	0.0826	1.9900e-003	7.8441
Unmitigated	2.5937	0.0413	9.9000e-004	3.9221

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.198769	0.2024	1.0000e-005	0.0000	0.2032
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	1.2643 / 0	2.3913	0.0413	9.9000e-004	3.7189
<b>Total</b>		<b>2.5937</b>	<b>0.0413</b>	<b>9.9000e-004</b>	<b>3.9221</b>

Rio Ranch Marketplace - Monterey County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.198769	0.4048	2.0000e-005	0.0000	0.4064
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	1.2643 / 0	4.7825	0.0826	1.9800e-003	7.4378
<b>Total</b>		<b>5.1873</b>	<b>0.0826</b>	<b>1.9800e-003</b>	<b>7.8441</b>

**8.0 Waste Detail**

---

**8.1 Mitigation Measures Waste**

Rio Ranch Marketplace - Monterey County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	30.4547	1.7998	0.0000	75.4503
Unmitigated	30.4547	1.7998	0.0000	75.4503

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	20.28	4.1167	0.2433	0.0000	10.1988
Supermarket	129.72	26.3320	1.5562	0.0000	65.2364
<b>Total</b>		<b>30.4547</b>	<b>1.7998</b>	<b>0.0000</b>	<b>75.4503</b>

Rio Ranch Marketplace - Monterey County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	20.28	4.1167	0.2433	0.0000	10.1988
Supermarket	129.72	26.3320	1.5562	0.0000	65.2364
<b>Total</b>		<b>30.4547</b>	<b>1.7998</b>	<b>0.0000</b>	<b>75.4503</b>

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

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

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Rio Ranch Marketplace - Monterey County, Annual

Equipment Type	Number
----------------	--------

**11.0 Vegetation**

---

Rio Ranch Marketplace - Monterey County, Winter

**Rio Ranch Marketplace**  
**Monterey County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	186.00	Space	1.67	74,400.00	0
City Park	0.35	Acre	0.35	15,400.00	0
Strip Mall	19.31	1000sqft	0.44	19,310.00	0
Supermarket	23.00	1000sqft	0.53	23,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.6	<b>Precipitation Freq (Days)</b>	55
<b>Climate Zone</b>	4			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Rio Ranch Marketplace - Monterey County, Winter

Project Characteristics -

Land Use - City Park represents landscaped area.

Construction Phase - 115 days for architectural coating application is expected.

Grading - 3.8-acre project site

Architectural Coating - Rule 426: 50 g/L flat coating limit

Vehicle Trips - Adjusted per Keith Higgins TIA (2017).

Water And Wastewater - Total water usage = 4.49 AFY.  
Of this, 0.61 AFY used for landscaping.

Mobile Land Use Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblConstructionPhase	NumDays	10.00	115.00
tblConstructionPhase	NumDays	220.00	185.00
tblConstructionPhase	NumDays	6.00	13.00
tblConstructionPhase	NumDays	3.00	7.00
tblEnergyUse	LightingElect	0.35	0.88
tblEnergyUse	LightingElect	5.25	5.38
tblEnergyUse	LightingElect	6.82	7.33
tblEnergyUse	T24E	2.76	2.89
tblEnergyUse	T24E	4.08	4.28
tblEnergyUse	T24NG	2.37	2.38
tblEnergyUse	T24NG	16.69	16.77
tblGrading	AcresOfGrading	6.50	3.80
tblGrading	AcresOfGrading	10.50	3.80
tblGrading	MaterialExported	0.00	8,832.00



Rio Ranch Marketplace - Monterey County, Winter

tblGrading	MaterialImported	0.00	22,483.00
tblLandUse	LandUseSquareFeet	15,246.00	15,400.00
tblVehicleTrips	DV_TP	40.00	18.00
tblVehicleTrips	DV_TP	30.00	18.00
tblVehicleTrips	PB_TP	15.00	7.00
tblVehicleTrips	PB_TP	36.00	7.00
tblVehicleTrips	PR_TP	45.00	75.00
tblVehicleTrips	PR_TP	34.00	75.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	42.04	127.01
tblVehicleTrips	ST_TR	177.59	127.01
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	20.43	91.77
tblVehicleTrips	SU_TR	166.44	91.77
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	44.32	91.77
tblVehicleTrips	WD_TR	102.24	91.77
tblWater	IndoorWaterUseRate	1,430,340.39	0.00
tblWater	IndoorWaterUseRate	2,835,168.94	1,264,302.00
tblWater	OutdoorWaterUseRate	417,018.47	198,769.00
tblWater	OutdoorWaterUseRate	876,660.24	0.00
tblWater	OutdoorWaterUseRate	87,685.64	0.00

**2.0 Emissions Summary**

---



Rio Ranch Marketplace - Monterey County, 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	1.1045	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Energy	0.0167	0.1517	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115		182.0589	182.0589	3.4900e-003	3.3400e-003	183.1408
Mobile	12.5200	53.0406	146.5983	0.3305	46.3419	0.3932	46.7351	11.9362	0.3696	12.3058		33,305.2022	33,305.2022	1.9730		33,354.5274
<b>Total</b>	<b>13.6412</b>	<b>53.1926</b>	<b>146.7492</b>	<b>0.3314</b>	<b>46.3419</b>	<b>0.4048</b>	<b>46.7467</b>	<b>11.9362</b>	<b>0.3812</b>	<b>12.3174</b>		<b>33,487.3112</b>	<b>33,487.3112</b>	<b>1.9766</b>	<b>3.3400e-003</b>	<b>33,537.7216</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	1.1045	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Energy	0.0167	0.1517	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115		182.0589	182.0589	3.4900e-003	3.3400e-003	183.1408
Mobile	12.0413	49.8936	136.6827	0.3000	41.7077	0.3587	42.0664	10.7426	0.3371	11.0797		30,225.2011	30,225.2011	1.8302		30,270.9549
<b>Total</b>	<b>13.1625</b>	<b>50.0456</b>	<b>136.8336</b>	<b>0.3009</b>	<b>41.7077</b>	<b>0.3703</b>	<b>42.0780</b>	<b>10.7426</b>	<b>0.3487</b>	<b>11.0913</b>		<b>30,407.3100</b>	<b>30,407.3100</b>	<b>1.8338</b>	<b>3.3400e-003</b>	<b>30,454.1491</b>

Rio Ranch Marketplace - Monterey County, 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	3.51	5.92	6.76	9.22	10.00	8.53	9.99	10.00	8.53	9.95	0.00	9.20	9.20	7.23	0.00	9.19

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/30/2018	8/7/2018	5	7	
2	Grading	Grading	8/8/2018	8/24/2018	5	13	
3	Building Construction	Building Construction	8/25/2018	5/10/2019	5	185	
4	Architectural Coating	Architectural Coating	12/14/2018	5/23/2019	5	115	
5	Paving	Paving	5/10/2019	5/23/2019	5	10	

Acres of Grading (Site Preparation Phase): 3.8

Acres of Grading (Grading Phase): 3.8

Acres of Paving: 1.67

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 63,465; Non-Residential Outdoor: 21,155; Striped Parking Area: 4,464 (Architectural Coating – sqft)

#### OffRoad Equipment

Rio Ranch Marketplace - Monterey County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	1,104.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,810.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	51.00	22.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Rio Ranch Marketplace - Monterey County, Winter

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8464	0.0000	0.8464	0.1032	0.0000	0.1032			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777		2,468.413 1	2,468.413 1	0.7685		2,487.624 4
<b>Total</b>	<b>1.8995</b>	<b>23.6201</b>	<b>12.7461</b>	<b>0.0245</b>	<b>0.8464</b>	<b>0.9540</b>	<b>1.8004</b>	<b>0.1032</b>	<b>0.8777</b>	<b>0.9808</b>		<b>2,468.413 1</b>	<b>2,468.413 1</b>	<b>0.7685</b>		<b>2,487.624 4</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.2 Site Preparation - 2018**

**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	1.7638	55.1199	11.8179	0.1289	2.7503	0.3373	3.0877	0.7533	0.3227	1.0760		13,644.9918	13,644.9918	0.5682		13,659.1970
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	0.0476	0.0461	0.3890	7.1000e-004	0.0657	6.1000e-004	0.0663	0.0174	5.7000e-004	0.0180		70.3285	70.3285	3.8000e-003		70.4236
<b>Total</b>	<b>1.8114</b>	<b>55.1661</b>	<b>12.2069</b>	<b>0.1296</b>	<b>2.8161</b>	<b>0.3379</b>	<b>3.1540</b>	<b>0.7707</b>	<b>0.3233</b>	<b>1.0940</b>		<b>13,715.3203</b>	<b>13,715.3203</b>	<b>0.5720</b>		<b>13,729.6206</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					0.8464	0.0000	0.8464	0.1032	0.0000	0.1032			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777	0.0000	2,468.4131	2,468.4131	0.7685		2,487.6244
<b>Total</b>	<b>1.8995</b>	<b>23.6201</b>	<b>12.7461</b>	<b>0.0245</b>	<b>0.8464</b>	<b>0.9540</b>	<b>1.8004</b>	<b>0.1032</b>	<b>0.8777</b>	<b>0.9808</b>	<b>0.0000</b>	<b>2,468.4131</b>	<b>2,468.4131</b>	<b>0.7685</b>		<b>2,487.6244</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.2 Site Preparation - 2018**

**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	1.7638	55.1199	11.8179	0.1289	4.8355	0.3373	5.1728	1.2651	0.3227	1.5878		13,644.9918	13,644.9918	0.5682		13,659.1970
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	0.0476	0.0461	0.3890	7.1000e-004	0.1228	6.1000e-004	0.1235	0.0315	5.7000e-004	0.0320		70.3285	70.3285	3.8000e-003		70.4236
<b>Total</b>	<b>1.8114</b>	<b>55.1661</b>	<b>12.2069</b>	<b>0.1296</b>	<b>4.9583</b>	<b>0.3379</b>	<b>5.2963</b>	<b>1.2966</b>	<b>0.3233</b>	<b>1.6199</b>		<b>13,715.3203</b>	<b>13,715.3203</b>	<b>0.5720</b>		<b>13,729.6206</b>

**3.3 Grading - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.7031	0.0000	6.7031	3.3999	0.0000	3.3999			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748		2,077.4666	2,077.4666	0.6467		2,093.6352
<b>Total</b>	<b>2.1515</b>	<b>24.2895</b>	<b>10.3804</b>	<b>0.0206</b>	<b>6.7031</b>	<b>1.1683</b>	<b>7.8714</b>	<b>3.3999</b>	<b>1.0748</b>	<b>4.4747</b>		<b>2,077.4666</b>	<b>2,077.4666</b>	<b>0.6467</b>		<b>2,093.6352</b>



Rio Ranch Marketplace - Monterey County, Winter

**3.3 Grading - 2018**

**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	2.4174	75.5441	16.1969	0.1767	3.7695	0.4623	4.2317	1.0324	0.4423	1.4747		18,701.0165	18,701.0165	0.7788		18,720.4853
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	0.0595	0.0577	0.4863	8.9000e-004	0.0822	7.7000e-004	0.0829	0.0218	7.1000e-004	0.0225		87.9107	87.9107	4.7600e-003		88.0295
<b>Total</b>	<b>2.4769</b>	<b>75.6018</b>	<b>16.6832</b>	<b>0.1776</b>	<b>3.8516</b>	<b>0.4631</b>	<b>4.3147</b>	<b>1.0542</b>	<b>0.4430</b>	<b>1.4972</b>		<b>18,788.9272</b>	<b>18,788.9272</b>	<b>0.7835</b>		<b>18,808.5148</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					6.7031	0.0000	6.7031	3.3999	0.0000	3.3999			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352
<b>Total</b>	<b>2.1515</b>	<b>24.2895</b>	<b>10.3804</b>	<b>0.0206</b>	<b>6.7031</b>	<b>1.1683</b>	<b>7.8714</b>	<b>3.3999</b>	<b>1.0748</b>	<b>4.4747</b>	<b>0.0000</b>	<b>2,077.4666</b>	<b>2,077.4666</b>	<b>0.6467</b>		<b>2,093.6352</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.3 Grading - 2018**

**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	2.4174	75.5441	16.1969	0.1767	6.6272	0.4623	7.0895	1.7339	0.4423	2.1762		18,701.0165	18,701.0165	0.7788		18,720.4853
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	0.0595	0.0577	0.4863	8.9000e-004	0.1535	7.7000e-004	0.1543	0.0393	7.1000e-004	0.0400		87.9107	87.9107	4.7600e-003		88.0295
<b>Total</b>	<b>2.4769</b>	<b>75.6018</b>	<b>16.6832</b>	<b>0.1776</b>	<b>6.7808</b>	<b>0.4631</b>	<b>7.2439</b>	<b>1.7732</b>	<b>0.4430</b>	<b>2.2162</b>		<b>18,788.9272</b>	<b>18,788.9272</b>	<b>0.7835</b>		<b>18,808.5148</b>

**3.4 Building Construction - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051		2,329.7759	2,329.7759	0.5019		2,342.3232
<b>Total</b>	<b>2.9127</b>	<b>20.7077</b>	<b>15.7183</b>	<b>0.0250</b>		<b>1.2575</b>	<b>1.2575</b>		<b>1.2051</b>	<b>1.2051</b>		<b>2,329.7759</b>	<b>2,329.7759</b>	<b>0.5019</b>		<b>2,342.3232</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.4 Building Construction - 2018**

**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	0.1448	3.1592	1.0380	6.2100e-003	0.1488	0.0290	0.1778	0.0428	0.0277	0.0705		652.0010	652.0010	0.0362		652.9070
Worker	0.3034	0.2941	2.4799	4.5200e-003	0.4190	3.9200e-003	0.4229	0.1111	3.6200e-003	0.1147		448.3444	448.3444	0.0243		448.9507
<b>Total</b>	<b>0.4481</b>	<b>3.4533</b>	<b>3.5179</b>	<b>0.0107</b>	<b>0.5677</b>	<b>0.0329</b>	<b>0.6006</b>	<b>0.1540</b>	<b>0.0313</b>	<b>0.1853</b>		<b>1,100.3453</b>	<b>1,100.3453</b>	<b>0.0605</b>		<b>1,101.8577</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	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051	0.0000	2,329.7759	2,329.7759	0.5019		2,342.3232
<b>Total</b>	<b>2.9127</b>	<b>20.7077</b>	<b>15.7183</b>	<b>0.0250</b>		<b>1.2575</b>	<b>1.2575</b>		<b>1.2051</b>	<b>1.2051</b>	<b>0.0000</b>	<b>2,329.7759</b>	<b>2,329.7759</b>	<b>0.5019</b>		<b>2,342.3232</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.4 Building Construction - 2018**

**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	0.1448	3.1592	1.0380	6.2100e-003	0.2550	0.0290	0.2839	0.0689	0.0277	0.0966		652.0010	652.0010	0.0362			652.9070
Worker	0.3034	0.2941	2.4799	4.5200e-003	0.7831	3.9200e-003	0.7870	0.2005	3.6200e-003	0.2041		448.3444	448.3444	0.0243			448.9507
<b>Total</b>	<b>0.4481</b>	<b>3.4533</b>	<b>3.5179</b>	<b>0.0107</b>	<b>1.0380</b>	<b>0.0329</b>	<b>1.0709</b>	<b>0.2694</b>	<b>0.0313</b>	<b>0.3007</b>		<b>1,100.3453</b>	<b>1,100.3453</b>	<b>0.0605</b>			<b>1,101.8577</b>

**3.4 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.1454	2,312.1454	0.4810			2,324.1705
<b>Total</b>	<b>2.5581</b>	<b>18.9103</b>	<b>15.2545</b>	<b>0.0250</b>		<b>1.0901</b>	<b>1.0901</b>		<b>1.0449</b>	<b>1.0449</b>		<b>2,312.1454</b>	<b>2,312.1454</b>	<b>0.4810</b>			<b>2,324.1705</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.4 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1256	2.9815	0.9194	6.1700e-003	0.1488	0.0235	0.1723	0.0428	0.0225	0.0653		648.9323	648.9323	0.0344		649.7926
Worker	0.2710	0.2585	2.1800	4.3800e-003	0.4190	3.7600e-003	0.4227	0.1111	3.4700e-003	0.1146		435.5886	435.5886	0.0213		436.1206
<b>Total</b>	<b>0.3966</b>	<b>3.2400</b>	<b>3.0994</b>	<b>0.0106</b>	<b>0.5678</b>	<b>0.0272</b>	<b>0.5950</b>	<b>0.1540</b>	<b>0.0259</b>	<b>0.1799</b>		<b>1,084.5209</b>	<b>1,084.5209</b>	<b>0.0557</b>		<b>1,085.9132</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	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.1454	2,312.1454	0.4810		2,324.1705
<b>Total</b>	<b>2.5581</b>	<b>18.9103</b>	<b>15.2545</b>	<b>0.0250</b>		<b>1.0901</b>	<b>1.0901</b>		<b>1.0449</b>	<b>1.0449</b>	<b>0.0000</b>	<b>2,312.1454</b>	<b>2,312.1454</b>	<b>0.4810</b>		<b>2,324.1705</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.4 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1256	2.9815	0.9194	6.1700e-003	0.2550	0.0235	0.2784	0.0689	0.0225	0.0913		648.9323	648.9323	0.0344		649.7926
Worker	0.2710	0.2585	2.1800	4.3800e-003	0.7831	3.7600e-003	0.7868	0.2005	3.4700e-003	0.2040		435.5886	435.5886	0.0213		436.1206
<b>Total</b>	<b>0.3966</b>	<b>3.2400</b>	<b>3.0994</b>	<b>0.0106</b>	<b>1.0380</b>	<b>0.0272</b>	<b>1.0653</b>	<b>0.2694</b>	<b>0.0259</b>	<b>0.2953</b>		<b>1,084.5209</b>	<b>1,084.5209</b>	<b>0.0557</b>		<b>1,085.9132</b>

**3.5 Architectural Coating - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>2.2738</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>		<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.5 Architectural Coating - 2018**

**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	0.0595	0.0577	0.4863	8.9000e-004	0.0822	7.7000e-004	0.0829	0.0218	7.1000e-004	0.0225		87.9107	87.9107	4.7600e-003		88.0295
<b>Total</b>	<b>0.0595</b>	<b>0.0577</b>	<b>0.4863</b>	<b>8.9000e-004</b>	<b>0.0822</b>	<b>7.7000e-004</b>	<b>0.0829</b>	<b>0.0218</b>	<b>7.1000e-004</b>	<b>0.0225</b>		<b>87.9107</b>	<b>87.9107</b>	<b>4.7600e-003</b>		<b>88.0295</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	1.9752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>2.2738</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>	<b>0.0000</b>	<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.5 Architectural Coating - 2018**

**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	0.0595	0.0577	0.4863	8.9000e-004	0.1535	7.7000e-004	0.1543	0.0393	7.1000e-004	0.0400		87.9107	87.9107	4.7600e-003		88.0295
<b>Total</b>	<b>0.0595</b>	<b>0.0577</b>	<b>0.4863</b>	<b>8.9000e-004</b>	<b>0.1535</b>	<b>7.7000e-004</b>	<b>0.1543</b>	<b>0.0393</b>	<b>7.1000e-004</b>	<b>0.0400</b>		<b>87.9107</b>	<b>87.9107</b>	<b>4.7600e-003</b>		<b>88.0295</b>

**3.5 Architectural Coating - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>2.2416</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>



Rio Ranch Marketplace - Monterey County, Winter

**3.5 Architectural Coating - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0531	0.0507	0.4275	8.6000e-004	0.0822	7.4000e-004	0.0829	0.0218	6.8000e-004	0.0225		85.4095	85.4095	4.1700e-003		85.5138
<b>Total</b>	<b>0.0531</b>	<b>0.0507</b>	<b>0.4275</b>	<b>8.6000e-004</b>	<b>0.0822</b>	<b>7.4000e-004</b>	<b>0.0829</b>	<b>0.0218</b>	<b>6.8000e-004</b>	<b>0.0225</b>		<b>85.4095</b>	<b>85.4095</b>	<b>4.1700e-003</b>		<b>85.5138</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	1.9752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>2.2416</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.5 Architectural Coating - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0531	0.0507	0.4275	8.6000e-004	0.1535	7.4000e-004	0.1543	0.0393	6.8000e-004	0.0400		85.4095	85.4095	4.1700e-003		85.5138
<b>Total</b>	<b>0.0531</b>	<b>0.0507</b>	<b>0.4275</b>	<b>8.6000e-004</b>	<b>0.1535</b>	<b>7.4000e-004</b>	<b>0.1543</b>	<b>0.0393</b>	<b>6.8000e-004</b>	<b>0.0400</b>		<b>85.4095</b>	<b>85.4095</b>	<b>4.1700e-003</b>		<b>85.5138</b>

**3.6 Paving - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728		1,746.2432	1,746.2432	0.5418		1,759.7870
Paving	0.4375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6829</b>	<b>12.5685</b>	<b>11.8507</b>	<b>0.0178</b>		<b>0.7301</b>	<b>0.7301</b>		<b>0.6728</b>	<b>0.6728</b>		<b>1,746.2432</b>	<b>1,746.2432</b>	<b>0.5418</b>		<b>1,759.7870</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.6 Paving - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0797	0.0760	0.6412	1.2900e-003	0.1232	1.1100e-003	0.1243	0.0327	1.0200e-003	0.0337		128.1143	128.1143	6.2600e-003		128.2708
<b>Total</b>	<b>0.0797</b>	<b>0.0760</b>	<b>0.6412</b>	<b>1.2900e-003</b>	<b>0.1232</b>	<b>1.1100e-003</b>	<b>0.1243</b>	<b>0.0327</b>	<b>1.0200e-003</b>	<b>0.0337</b>		<b>128.1143</b>	<b>128.1143</b>	<b>6.2600e-003</b>		<b>128.2708</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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728	0.0000	1,746.2432	1,746.2432	0.5418		1,759.7870
Paving	0.4375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6829</b>	<b>12.5685</b>	<b>11.8507</b>	<b>0.0178</b>		<b>0.7301</b>	<b>0.7301</b>		<b>0.6728</b>	<b>0.6728</b>	<b>0.0000</b>	<b>1,746.2432</b>	<b>1,746.2432</b>	<b>0.5418</b>		<b>1,759.7870</b>

Rio Ranch Marketplace - Monterey County, Winter

**3.6 Paving - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0797	0.0760	0.6412	1.2900e-003	0.2303	1.1100e-003	0.2314	0.0590	1.0200e-003	0.0600		128.1143	128.1143	6.2600e-003		128.2708
<b>Total</b>	<b>0.0797</b>	<b>0.0760</b>	<b>0.6412</b>	<b>1.2900e-003</b>	<b>0.2303</b>	<b>1.1100e-003</b>	<b>0.2314</b>	<b>0.0590</b>	<b>1.0200e-003</b>	<b>0.0600</b>		<b>128.1143</b>	<b>128.1143</b>	<b>6.2600e-003</b>		<b>128.2708</b>

**4.0 Operational Detail - Mobile**

---

**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Rio Ranch Marketplace - Monterey County, 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	12.0413	49.8936	136.6827	0.3000	41.7077	0.3587	42.0664	10.7426	0.3371	11.0797		30,225.20 11	30,225.20 11	1.8302		30,270.95 49
Unmitigated	12.5200	53.0406	146.5983	0.3305	46.3419	0.3932	46.7351	11.9362	0.3696	12.3058		33,305.20 22	33,305.20 22	1.9730		33,354.52 74

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	1,772.08	2,452.56	1772.08	4,151,141	3,736,027
Supermarket	2,110.71	2,921.23	2110.71	4,801,229	4,321,106
Total	3,882.79	5,373.79	3,882.79	8,952,370	8,057,133

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	75	18	7
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	75	18	7

4.4 Fleet Mix

Rio Ranch Marketplace - Monterey County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Parking Lot	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Strip Mall	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Supermarket	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0167	0.1517	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115		182.0589	182.0589	3.4900e-003	3.3400e-003	183.1408
NaturalGas Unmitigated	0.0167	0.1517	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115		182.0589	182.0589	3.4900e-003	3.3400e-003	183.1408

Rio Ranch Marketplace - Monterey County, 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					
City Park	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
Strip Mall	125.912	1.3600e-003	0.0123	0.0104	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004		14.8132	14.8132	2.8000e-004	2.7000e-004	14.9012
Supermarket	1421.59	0.0153	0.1394	0.1171	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.2458	167.2458	3.2100e-003	3.0700e-003	168.2396
<b>Total</b>		<b>0.0167</b>	<b>0.1517</b>	<b>0.1274</b>	<b>9.1000e-004</b>		<b>0.0115</b>	<b>0.0115</b>		<b>0.0115</b>	<b>0.0115</b>		<b>182.0589</b>	<b>182.0589</b>	<b>3.4900e-003</b>	<b>3.3400e-003</b>	<b>183.1408</b>

Rio Ranch Marketplace - Monterey County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	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
Strip Mall	0.125912	1.3600e-003	0.0123	0.0104	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004		14.8132	14.8132	2.8000e-004	2.7000e-004	14.9012
Supermarket	1.42159	0.0153	0.1394	0.1171	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.2458	167.2458	3.2100e-003	3.0700e-003	168.2396
<b>Total</b>		<b>0.0167</b>	<b>0.1517</b>	<b>0.1274</b>	<b>9.1000e-004</b>		<b>0.0115</b>	<b>0.0115</b>		<b>0.0115</b>	<b>0.0115</b>		<b>182.0589</b>	<b>182.0589</b>	<b>3.4900e-003</b>	<b>3.3400e-003</b>	<b>183.1408</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**



Rio Ranch Marketplace - Monterey County, 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	1.1045	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Unmitigated	1.1045	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534

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	0.1697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9326					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2100e-003	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
<b>Total</b>	<b>1.1045</b>	<b>2.2000e-004</b>	<b>0.0235</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0500</b>	<b>0.0500</b>	<b>1.3000e-004</b>		<b>0.0534</b>

Rio Ranch Marketplace - Monterey County, 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	0.1697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9326					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2100e-003	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
<b>Total</b>	<b>1.1045</b>	<b>2.2000e-004</b>	<b>0.0235</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0500</b>	<b>0.0500</b>	<b>1.3000e-004</b>		<b>0.0534</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Rio Ranch Marketplace - Monterey County, Winter

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

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**11.0 Vegetation**

---

Rio Ranch Marketplace - Monterey County, Summer

**Rio Ranch Marketplace  
Monterey County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	186.00	Space	1.67	74,400.00	0
City Park	0.35	Acre	0.35	15,400.00	0
Strip Mall	19.31	1000sqft	0.44	19,310.00	0
Supermarket	23.00	1000sqft	0.53	23,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.6	<b>Precipitation Freq (Days)</b>	55
<b>Climate Zone</b>	4			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Rio Ranch Marketplace - Monterey County, Summer

Project Characteristics -

Land Use - City Park represents landscaped area.

Construction Phase - 115 days for architectural coating application is expected.

Grading - 3.8-acre project site

Architectural Coating - Rule 426: 50 g/L flat coating limit

Vehicle Trips - Adjusted per Keith Higgins TIA (2017).

Water And Wastewater - Total water usage = 4.49 AFY.  
Of this, 0.61 AFY used for landscaping.

Mobile Land Use Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblConstructionPhase	NumDays	10.00	115.00
tblConstructionPhase	NumDays	220.00	185.00
tblConstructionPhase	NumDays	6.00	13.00
tblConstructionPhase	NumDays	3.00	7.00
tblEnergyUse	LightingElect	0.35	0.88
tblEnergyUse	LightingElect	5.25	5.38
tblEnergyUse	LightingElect	6.82	7.33
tblEnergyUse	T24E	2.76	2.89
tblEnergyUse	T24E	4.08	4.28
tblEnergyUse	T24NG	2.37	2.38
tblEnergyUse	T24NG	16.69	16.77
tblGrading	AcresOfGrading	6.50	3.80
tblGrading	AcresOfGrading	10.50	3.80
tblGrading	MaterialExported	0.00	8,832.00

Rio Ranch Marketplace - Monterey County, Summer

tblGrading	MaterialImported	0.00	22,483.00
tblLandUse	LandUseSquareFeet	15,246.00	15,400.00
tblVehicleTrips	DV_TP	40.00	18.00
tblVehicleTrips	DV_TP	30.00	18.00
tblVehicleTrips	PB_TP	15.00	7.00
tblVehicleTrips	PB_TP	36.00	7.00
tblVehicleTrips	PR_TP	45.00	75.00
tblVehicleTrips	PR_TP	34.00	75.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	42.04	127.01
tblVehicleTrips	ST_TR	177.59	127.01
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	20.43	91.77
tblVehicleTrips	SU_TR	166.44	91.77
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	44.32	91.77
tblVehicleTrips	WD_TR	102.24	91.77
tblWater	IndoorWaterUseRate	1,430,340.39	0.00
tblWater	IndoorWaterUseRate	2,835,168.94	1,264,302.00
tblWater	OutdoorWaterUseRate	417,018.47	198,769.00
tblWater	OutdoorWaterUseRate	876,660.24	0.00
tblWater	OutdoorWaterUseRate	87,685.64	0.00

**2.0 Emissions Summary**

---



Rio Ranch Marketplace - Monterey County, 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	1.1045	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Energy	0.0167	0.1517	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115		182.0589	182.0589	3.4900e-003	3.3400e-003	183.1408
Mobile	13.3945	49.3824	138.3452	0.3490	46.3419	0.3885	46.7304	11.9362	0.3651	12.3013		35,176.9091	35,176.9091	1.9346		35,225.2752
<b>Total</b>	<b>14.5157</b>	<b>49.5344</b>	<b>138.4962</b>	<b>0.3499</b>	<b>46.3419</b>	<b>0.4001</b>	<b>46.7420</b>	<b>11.9362</b>	<b>0.3767</b>	<b>12.3129</b>		<b>35,359.0181</b>	<b>35,359.0181</b>	<b>1.9383</b>	<b>3.3400e-003</b>	<b>35,408.4694</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	1.1045	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Energy	0.0167	0.1517	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115		182.0589	182.0589	3.4900e-003	3.3400e-003	183.1408
Mobile	12.9123	46.5916	127.7211	0.3168	41.7077	0.3540	42.0616	10.7426	0.3326	11.0752		31,934.3730	31,934.3730	1.7854		31,979.0072
<b>Total</b>	<b>14.0335</b>	<b>46.7435</b>	<b>127.8721</b>	<b>0.3177</b>	<b>41.7077</b>	<b>0.3656</b>	<b>42.0732</b>	<b>10.7426</b>	<b>0.3442</b>	<b>11.0868</b>		<b>32,116.4820</b>	<b>32,116.4820</b>	<b>1.7890</b>	<b>3.3400e-003</b>	<b>32,162.2014</b>



## Rio Ranch Marketplace - Monterey County, 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	3.32	5.63	7.67	9.20	10.00	8.64	9.99	10.00	8.63	9.96	0.00	9.17	9.17	7.70	0.00	9.17

### 3.0 Construction Detail

---

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/30/2018	8/7/2018	5	7	
2	Grading	Grading	8/8/2018	8/24/2018	5	13	
3	Building Construction	Building Construction	8/25/2018	5/10/2019	5	185	
4	Architectural Coating	Architectural Coating	12/14/2018	5/23/2019	5	115	
5	Paving	Paving	5/10/2019	5/23/2019	5	10	

**Acres of Grading (Site Preparation Phase): 3.8**

**Acres of Grading (Grading Phase): 3.8**

**Acres of Paving: 1.67**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 63,465; Non-Residential Outdoor: 21,155; Striped Parking Area: 4,464 (Architectural Coating – sqft)**

#### OffRoad Equipment

Rio Ranch Marketplace - Monterey County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	1,104.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,810.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	51.00	22.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Rio Ranch Marketplace - Monterey County, Summer

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8464	0.0000	0.8464	0.1032	0.0000	0.1032			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777		2,468.413 1	2,468.413 1	0.7685		2,487.624 4
<b>Total</b>	<b>1.8995</b>	<b>23.6201</b>	<b>12.7461</b>	<b>0.0245</b>	<b>0.8464</b>	<b>0.9540</b>	<b>1.8004</b>	<b>0.1032</b>	<b>0.8777</b>	<b>0.9808</b>		<b>2,468.413 1</b>	<b>2,468.413 1</b>	<b>0.7685</b>		<b>2,487.624 4</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.2 Site Preparation - 2018**

**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	1.7141	53.6965	10.9474	0.1313	2.7503	0.3307	3.0811	0.7533	0.3164	1.0697		13,901.3961	13,901.3961	0.5331		13,914.7232
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	0.0435	0.0367	0.3906	7.6000e-004	0.0657	6.1000e-004	0.0663	0.0174	5.7000e-004	0.0180		75.0974	75.0974	3.9500e-003		75.1960
<b>Total</b>	<b>1.7577</b>	<b>53.7332</b>	<b>11.3380</b>	<b>0.1321</b>	<b>2.8161</b>	<b>0.3313</b>	<b>3.1474</b>	<b>0.7707</b>	<b>0.3170</b>	<b>1.0877</b>		<b>13,976.4935</b>	<b>13,976.4935</b>	<b>0.5370</b>		<b>13,989.9193</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					0.8464	0.0000	0.8464	0.1032	0.0000	0.1032			0.0000			0.0000
Off-Road	1.8995	23.6201	12.7461	0.0245		0.9540	0.9540		0.8777	0.8777	0.0000	2,468.4131	2,468.4131	0.7685		2,487.6244
<b>Total</b>	<b>1.8995</b>	<b>23.6201</b>	<b>12.7461</b>	<b>0.0245</b>	<b>0.8464</b>	<b>0.9540</b>	<b>1.8004</b>	<b>0.1032</b>	<b>0.8777</b>	<b>0.9808</b>	<b>0.0000</b>	<b>2,468.4131</b>	<b>2,468.4131</b>	<b>0.7685</b>		<b>2,487.6244</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.2 Site Preparation - 2018**

**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	1.7141	53.6965	10.9474	0.1313	4.8355	0.3307	5.1662	1.2651	0.3164	1.5815		13,901.3961	13,901.3961	0.5331		13,914.7232
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	0.0435	0.0367	0.3906	7.6000e-004	0.1228	6.1000e-004	0.1235	0.0315	5.7000e-004	0.0320		75.0974	75.0974	3.9500e-003		75.1960
<b>Total</b>	<b>1.7577</b>	<b>53.7332</b>	<b>11.3380</b>	<b>0.1321</b>	<b>4.9583</b>	<b>0.3313</b>	<b>5.2897</b>	<b>1.2966</b>	<b>0.3170</b>	<b>1.6135</b>		<b>13,976.4935</b>	<b>13,976.4935</b>	<b>0.5370</b>		<b>13,989.9193</b>

**3.3 Grading - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.7031	0.0000	6.7031	3.3999	0.0000	3.3999			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748		2,077.4666	2,077.4666	0.6467		2,093.6352
<b>Total</b>	<b>2.1515</b>	<b>24.2895</b>	<b>10.3804</b>	<b>0.0206</b>	<b>6.7031</b>	<b>1.1683</b>	<b>7.8714</b>	<b>3.3999</b>	<b>1.0748</b>	<b>4.4747</b>		<b>2,077.4666</b>	<b>2,077.4666</b>	<b>0.6467</b>		<b>2,093.6352</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.3 Grading - 2018**

**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	2.3493	73.5933	15.0038	0.1800	3.7695	0.4533	4.2227	1.0324	0.4337	1.4661		19,052.4291	19,052.4291	0.7306		19,070.6944
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	0.0544	0.0458	0.4883	9.5000e-004	0.0822	7.7000e-004	0.0829	0.0218	7.1000e-004	0.0225		93.8717	93.8717	4.9300e-003		93.9951
<b>Total</b>	<b>2.4037</b>	<b>73.6391</b>	<b>15.4921</b>	<b>0.1810</b>	<b>3.8516</b>	<b>0.4540</b>	<b>4.3056</b>	<b>1.0542</b>	<b>0.4344</b>	<b>1.4886</b>		<b>19,146.3008</b>	<b>19,146.3008</b>	<b>0.7355</b>		<b>19,164.6895</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					6.7031	0.0000	6.7031	3.3999	0.0000	3.3999			0.0000			0.0000
Off-Road	2.1515	24.2895	10.3804	0.0206		1.1683	1.1683		1.0748	1.0748	0.0000	2,077.4666	2,077.4666	0.6467		2,093.6352
<b>Total</b>	<b>2.1515</b>	<b>24.2895</b>	<b>10.3804</b>	<b>0.0206</b>	<b>6.7031</b>	<b>1.1683</b>	<b>7.8714</b>	<b>3.3999</b>	<b>1.0748</b>	<b>4.4747</b>	<b>0.0000</b>	<b>2,077.4666</b>	<b>2,077.4666</b>	<b>0.6467</b>		<b>2,093.6352</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.3 Grading - 2018**

**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	2.3493	73.5933	15.0038	0.1800	6.6272	0.4533	7.0805	1.7339	0.4337	2.1675		19,052.4291	19,052.4291	0.7306		19,070.6944
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	0.0544	0.0458	0.4883	9.5000e-004	0.1535	7.7000e-004	0.1543	0.0393	7.1000e-004	0.0400		93.8717	93.8717	4.9300e-003		93.9951
<b>Total</b>	<b>2.4037</b>	<b>73.6391</b>	<b>15.4921</b>	<b>0.1810</b>	<b>6.7808</b>	<b>0.4540</b>	<b>7.2348</b>	<b>1.7732</b>	<b>0.4344</b>	<b>2.2076</b>		<b>19,146.3008</b>	<b>19,146.3008</b>	<b>0.7355</b>		<b>19,164.6895</b>

**3.4 Building Construction - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051		2,329.7759	2,329.7759	0.5019		2,342.3232
<b>Total</b>	<b>2.9127</b>	<b>20.7077</b>	<b>15.7183</b>	<b>0.0250</b>		<b>1.2575</b>	<b>1.2575</b>		<b>1.2051</b>	<b>1.2051</b>		<b>2,329.7759</b>	<b>2,329.7759</b>	<b>0.5019</b>		<b>2,342.3232</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.4 Building Construction - 2018**

**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	0.1378	3.1082	0.9177	6.3800e-003	0.1488	0.0284	0.1772	0.0428	0.0272	0.0700		670.4234	670.4234	0.0335		671.2597
Worker	0.2775	0.2337	2.4903	4.8200e-003	0.4190	3.9200e-003	0.4229	0.1111	3.6200e-003	0.1147		478.7457	478.7457	0.0252		479.3748
<b>Total</b>	<b>0.4153</b>	<b>3.3419</b>	<b>3.4080</b>	<b>0.0112</b>	<b>0.5677</b>	<b>0.0323</b>	<b>0.6001</b>	<b>0.1540</b>	<b>0.0308</b>	<b>0.1848</b>		<b>1,149.1691</b>	<b>1,149.1691</b>	<b>0.0586</b>		<b>1,150.6345</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	2.9127	20.7077	15.7183	0.0250		1.2575	1.2575		1.2051	1.2051	0.0000	2,329.7759	2,329.7759	0.5019		2,342.3232
<b>Total</b>	<b>2.9127</b>	<b>20.7077</b>	<b>15.7183</b>	<b>0.0250</b>		<b>1.2575</b>	<b>1.2575</b>		<b>1.2051</b>	<b>1.2051</b>	<b>0.0000</b>	<b>2,329.7759</b>	<b>2,329.7759</b>	<b>0.5019</b>		<b>2,342.3232</b>



Rio Ranch Marketplace - Monterey County, Summer

**3.4 Building Construction - 2018**

**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	0.1378	3.1082	0.9177	6.3800e-003	0.2550	0.0284	0.2834	0.0689	0.0272	0.0961		670.4234	670.4234	0.0335		671.2597
Worker	0.2775	0.2337	2.4903	4.8200e-003	0.7831	3.9200e-003	0.7870	0.2005	3.6200e-003	0.2041		478.7457	478.7457	0.0252		479.3748
<b>Total</b>	<b>0.4153</b>	<b>3.3419</b>	<b>3.4080</b>	<b>0.0112</b>	<b>1.0380</b>	<b>0.0323</b>	<b>1.0704</b>	<b>0.2694</b>	<b>0.0308</b>	<b>0.3002</b>		<b>1,149.1691</b>	<b>1,149.1691</b>	<b>0.0586</b>		<b>1,150.6345</b>

**3.4 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.1454	2,312.1454	0.4810		2,324.1705
<b>Total</b>	<b>2.5581</b>	<b>18.9103</b>	<b>15.2545</b>	<b>0.0250</b>		<b>1.0901</b>	<b>1.0901</b>		<b>1.0449</b>	<b>1.0449</b>		<b>2,312.1454</b>	<b>2,312.1454</b>	<b>0.4810</b>		<b>2,324.1705</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.4 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1195	2.9390	0.8096	6.3500e-003	0.1488	0.0230	0.1718	0.0428	0.0220	0.0648		667.7449	667.7449	0.0317		668.5363
Worker	0.2486	0.2053	2.2032	4.6800e-003	0.4190	3.7600e-003	0.4227	0.1111	3.4700e-003	0.1146		465.1819	465.1819	0.0222		465.7358
<b>Total</b>	<b>0.3680</b>	<b>3.1443</b>	<b>3.0127</b>	<b>0.0110</b>	<b>0.5678</b>	<b>0.0267</b>	<b>0.5945</b>	<b>0.1540</b>	<b>0.0254</b>	<b>0.1794</b>		<b>1,132.9269</b>	<b>1,132.9269</b>	<b>0.0538</b>		<b>1,134.2721</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	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.1454	2,312.1454	0.4810		2,324.1705
<b>Total</b>	<b>2.5581</b>	<b>18.9103</b>	<b>15.2545</b>	<b>0.0250</b>		<b>1.0901</b>	<b>1.0901</b>		<b>1.0449</b>	<b>1.0449</b>	<b>0.0000</b>	<b>2,312.1454</b>	<b>2,312.1454</b>	<b>0.4810</b>		<b>2,324.1705</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.4 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1195	2.9390	0.8096	6.3500e-003	0.2550	0.0230	0.2779	0.0689	0.0220	0.0909		667.7449	667.7449	0.0317		668.5363
Worker	0.2486	0.2053	2.2032	4.6800e-003	0.7831	3.7600e-003	0.7868	0.2005	3.4700e-003	0.2040		465.1819	465.1819	0.0222		465.7358
<b>Total</b>	<b>0.3680</b>	<b>3.1443</b>	<b>3.0127</b>	<b>0.0110</b>	<b>1.0380</b>	<b>0.0267</b>	<b>1.0648</b>	<b>0.2694</b>	<b>0.0254</b>	<b>0.2948</b>		<b>1,132.9269</b>	<b>1,132.9269</b>	<b>0.0538</b>		<b>1,134.2721</b>

**3.5 Architectural Coating - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>2.2738</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>		<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.5 Architectural Coating - 2018**

**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	0.0544	0.0458	0.4883	9.5000e-004	0.0822	7.7000e-004	0.0829	0.0218	7.1000e-004	0.0225		93.8717	93.8717	4.9300e-003		93.9951
<b>Total</b>	<b>0.0544</b>	<b>0.0458</b>	<b>0.4883</b>	<b>9.5000e-004</b>	<b>0.0822</b>	<b>7.7000e-004</b>	<b>0.0829</b>	<b>0.0218</b>	<b>7.1000e-004</b>	<b>0.0225</b>		<b>93.8717</b>	<b>93.8717</b>	<b>4.9300e-003</b>		<b>93.9951</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	1.9752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
<b>Total</b>	<b>2.2738</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>	<b>0.0000</b>	<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.1171</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.5 Architectural Coating - 2018**

**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	0.0544	0.0458	0.4883	9.5000e-004	0.1535	7.7000e-004	0.1543	0.0393	7.1000e-004	0.0400		93.8717	93.8717	4.9300e-003		93.9951
<b>Total</b>	<b>0.0544</b>	<b>0.0458</b>	<b>0.4883</b>	<b>9.5000e-004</b>	<b>0.1535</b>	<b>7.7000e-004</b>	<b>0.1543</b>	<b>0.0393</b>	<b>7.1000e-004</b>	<b>0.0400</b>		<b>93.8717</b>	<b>93.8717</b>	<b>4.9300e-003</b>		<b>93.9951</b>

**3.5 Architectural Coating - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.9752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>2.2416</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.5 Architectural Coating - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0403	0.4320	9.2000e-004	0.0822	7.4000e-004	0.0829	0.0218	6.8000e-004	0.0225		91.2122	91.2122	4.3400e-003		91.3208
<b>Total</b>	<b>0.0487</b>	<b>0.0403</b>	<b>0.4320</b>	<b>9.2000e-004</b>	<b>0.0822</b>	<b>7.4000e-004</b>	<b>0.0829</b>	<b>0.0218</b>	<b>6.8000e-004</b>	<b>0.0225</b>		<b>91.2122</b>	<b>91.2122</b>	<b>4.3400e-003</b>		<b>91.3208</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	1.9752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>2.2416</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.5 Architectural Coating - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0403	0.4320	9.2000e-004	0.1535	7.4000e-004	0.1543	0.0393	6.8000e-004	0.0400		91.2122	91.2122	4.3400e-003		91.3208
<b>Total</b>	<b>0.0487</b>	<b>0.0403</b>	<b>0.4320</b>	<b>9.2000e-004</b>	<b>0.1535</b>	<b>7.4000e-004</b>	<b>0.1543</b>	<b>0.0393</b>	<b>6.8000e-004</b>	<b>0.0400</b>		<b>91.2122</b>	<b>91.2122</b>	<b>4.3400e-003</b>		<b>91.3208</b>

**3.6 Paving - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728		1,746.2432	1,746.2432	0.5418		1,759.7870
Paving	0.4375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6829</b>	<b>12.5685</b>	<b>11.8507</b>	<b>0.0178</b>		<b>0.7301</b>	<b>0.7301</b>		<b>0.6728</b>	<b>0.6728</b>		<b>1,746.2432</b>	<b>1,746.2432</b>	<b>0.5418</b>		<b>1,759.7870</b>

Rio Ranch Marketplace - Monterey County, Summer

**3.6 Paving - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0604	0.6480	1.3800e-003	0.1232	1.1100e-003	0.1243	0.0327	1.0200e-003	0.0337		136.8182	136.8182	6.5200e-003		136.9811
<b>Total</b>	<b>0.0731</b>	<b>0.0604</b>	<b>0.6480</b>	<b>1.3800e-003</b>	<b>0.1232</b>	<b>1.1100e-003</b>	<b>0.1243</b>	<b>0.0327</b>	<b>1.0200e-003</b>	<b>0.0337</b>		<b>136.8182</b>	<b>136.8182</b>	<b>6.5200e-003</b>		<b>136.9811</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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728	0.0000	1,746.2432	1,746.2432	0.5418		1,759.7870
Paving	0.4375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6829</b>	<b>12.5685</b>	<b>11.8507</b>	<b>0.0178</b>		<b>0.7301</b>	<b>0.7301</b>		<b>0.6728</b>	<b>0.6728</b>	<b>0.0000</b>	<b>1,746.2432</b>	<b>1,746.2432</b>	<b>0.5418</b>		<b>1,759.7870</b>



Rio Ranch Marketplace - Monterey County, Summer

**3.6 Paving - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0604	0.6480	1.3800e-003	0.2303	1.1100e-003	0.2314	0.0590	1.0200e-003	0.0600		136.8182	136.8182	6.5200e-003		136.9811
<b>Total</b>	<b>0.0731</b>	<b>0.0604</b>	<b>0.6480</b>	<b>1.3800e-003</b>	<b>0.2303</b>	<b>1.1100e-003</b>	<b>0.2314</b>	<b>0.0590</b>	<b>1.0200e-003</b>	<b>0.0600</b>		<b>136.8182</b>	<b>136.8182</b>	<b>6.5200e-003</b>		<b>136.9811</b>

**4.0 Operational Detail - Mobile**

---

**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Rio Ranch Marketplace - Monterey County, 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	12.9123	46.5916	127.7211	0.3168	41.7077	0.3540	42.0616	10.7426	0.3326	11.0752		31,934.37 30	31,934.37 30	1.7854		31,979.00 72
Unmitigated	13.3945	49.3824	138.3452	0.3490	46.3419	0.3885	46.7304	11.9362	0.3651	12.3013		35,176.90 91	35,176.90 91	1.9346		35,225.27 52

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	1,772.08	2,452.56	1772.08	4,151,141	3,736,027
Supermarket	2,110.71	2,921.23	2110.71	4,801,229	4,321,106
Total	3,882.79	5,373.79	3,882.79	8,952,370	8,057,133

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	75	18	7
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	75	18	7

4.4 Fleet Mix

Rio Ranch Marketplace - Monterey County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Parking Lot	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Strip Mall	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Supermarket	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0167	0.1517	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115		182.0589	182.0589	3.4900e-003	3.3400e-003	183.1408
NaturalGas Unmitigated	0.0167	0.1517	0.1274	9.1000e-004		0.0115	0.0115		0.0115	0.0115		182.0589	182.0589	3.4900e-003	3.3400e-003	183.1408

Rio Ranch Marketplace - Monterey County, 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					
City Park	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
Strip Mall	125.912	1.3600e-003	0.0123	0.0104	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004		14.8132	14.8132	2.8000e-004	2.7000e-004	14.9012
Supermarket	1421.59	0.0153	0.1394	0.1171	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.2458	167.2458	3.2100e-003	3.0700e-003	168.2396
<b>Total</b>		<b>0.0167</b>	<b>0.1517</b>	<b>0.1274</b>	<b>9.1000e-004</b>		<b>0.0115</b>	<b>0.0115</b>		<b>0.0115</b>	<b>0.0115</b>		<b>182.0589</b>	<b>182.0589</b>	<b>3.4900e-003</b>	<b>3.3400e-003</b>	<b>183.1408</b>

Rio Ranch Marketplace - Monterey County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	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
Strip Mall	0.125912	1.3600e-003	0.0123	0.0104	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004		14.8132	14.8132	2.8000e-004	2.7000e-004	14.9012
Supermarket	1.42159	0.0153	0.1394	0.1171	8.4000e-004		0.0106	0.0106		0.0106	0.0106		167.2458	167.2458	3.2100e-003	3.0700e-003	168.2396
<b>Total</b>		<b>0.0167</b>	<b>0.1517</b>	<b>0.1274</b>	<b>9.1000e-004</b>		<b>0.0115</b>	<b>0.0115</b>		<b>0.0115</b>	<b>0.0115</b>		<b>182.0589</b>	<b>182.0589</b>	<b>3.4900e-003</b>	<b>3.3400e-003</b>	<b>183.1408</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rio Ranch Marketplace - Monterey County, 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	1.1045	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Unmitigated	1.1045	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534

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	0.1697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9326					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2100e-003	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
<b>Total</b>	<b>1.1045</b>	<b>2.2000e-004</b>	<b>0.0235</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0500</b>	<b>0.0500</b>	<b>1.3000e-004</b>		<b>0.0534</b>

Rio Ranch Marketplace - Monterey County, 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	0.1697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9326					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2100e-003	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
<b>Total</b>	<b>1.1045</b>	<b>2.2000e-004</b>	<b>0.0235</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0500</b>	<b>0.0500</b>	<b>1.3000e-004</b>		<b>0.0534</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

Fire Pumps and Emergency Generators

Rio Ranch Marketplace - Monterey County, Summer

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

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**11.0 Vegetation**

---



**Greenhouse Gas Emission Worksheet**  
**N<sub>2</sub>O Mobile Emissions**

12/20/2017  
 Rio Ranch Marketplace

From CalEEMod v.2016.3.1 Vehicle Fleet Mix Output:

Annual VMT: **8,057,133**

Vehicle Type	Percent Type	CH <sub>4</sub> Emission Factor (g/mile)*	CH <sub>4</sub> Emissions (g/mile)**	N <sub>2</sub> O Emission Factor (g/mile)*	N <sub>2</sub> O Emissions (g/mile)**
Light Auto	53.3%	0.04	0.0213254	0.04	0.0213254
Light Truck < 3750 lbs	3.1%	0.05	0.00154385	0.06	0.00185262
Light Truck 3751-5750 lbs	20.3%	0.05	0.01013325	0.06	0.0121599
Med Truck 5751-8500 lbs	14.1%	0.12	0.01694544	0.2	0.0282424
Lite-Heavy Truck 8501-10,000 lbs	2.5%	0.12	0.0029946	0.2	0.004991
Lite-Heavy Truck 10,001-14,000 lbs	0.6%	0.09	0.00054243	0.125	0.000753375
Med-Heavy Truck 14,001-33,000 lbs	1.8%	0.06	0.00108432	0.05	0.0009036
Heavy-Heavy Truck 33,001-60,000 lbs	2.6%	0.06	0.00155406	0.05	0.00129505
Other Bus	0.4%	0.06	0.000249	0.05	0.0002075
Urban Bus	0.3%	0.06	0.00017754	0.05	0.00014795
Motorcycle	0.8%	0.09	0.0007101	0.01	0.0000789
School Bus	0.1%	0.06	0.00007518	0.05	0.00006265
Motor Home	0.1%	0.09	0.00008145	0.125	0.000113125
<b>Total</b>	<b>100.0%</b>		<b>0.05741662</b>		<b>0.07213347</b>

**Total Emissions (metric tons) =**  
**Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g**

**Conversion to Carbon Dioxide Equivalency (CO<sub>2</sub>e) Units based on Global Warming Potential (GWP)**

CH<sub>4</sub> 21 GWP  
 N<sub>2</sub>O 310 GWP  
 1 ton (short, US) = 0.90718474 metric ton

**Annual Mobile Emissions:**

	Total Emissions	Total CO <sub>2</sub> e units
N <sub>2</sub> O Emissions:	0.5812 metric tons N <sub>2</sub> O	180.17 metric tons CO <sub>2</sub> e
<b>Project Total:</b>		<b>180.17 metric tons CO<sub>2</sub>e</b>

**References**

\* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).  
 in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.  
 Assume Model year 2000-present, gasoline fueled.  
 \*\* Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.  
 \*\*\* CalEEMod v.2016.3.1 results for mobile sources.