

Newport Place-Existing Uses Operational Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	5.47	1000sqft	0.13	5,467.00	0
High Turnover (Sit Down Restaurant)	5.71	1000sqft	0.13	5,713.00	0
Quality Restaurant	10.17	1000sqft	0.23	10,174.00	0
Strip Mall	22.97	1000sqft	0.53	22,967.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2015
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Existing Site Uses

Construction Phase - operational emissions only

Off-road Equipment - operational emissions

Trips and VMT - no construction emissions

Grading -

Vehicle Trips - trip rates per traffic consultant

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	1.00
tblLandUse	LandUseSquareFeet	5,470.00	5,467.00
tblLandUse	LandUseSquareFeet	5,710.00	5,713.00
tblLandUse	LandUseSquareFeet	22,970.00	22,967.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	158.37	127.15
tblVehicleTrips	ST_TR	94.36	89.95
tblVehicleTrips	SU_TR	72.16	89.95

2.0 Emissions Summary

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	0.2116	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-003	1.1000e-003	0.0000	0.0000	1.1700e-003
Energy	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	516.0149	516.0149	0.0176	6.9200e-003	518.5310
Mobile	1.4538	2.6056	12.6446	0.0236	1.6836	0.0319	1.7155	0.4498	0.0293	0.4791	0.0000	1,918.9221	1,918.9221	0.0868	0.0000	1,920.7451
Waste						0.0000	0.0000		0.0000	0.0000	32.5658	0.0000	32.5658	1.9246	0.0000	72.9822
Water						0.0000	0.0000		0.0000	0.0000	2.2868	31.5674	33.8541	0.2363	5.8500e-003	40.6291
Total	1.6884	2.8156	12.8216	0.0249	1.6836	0.0479	1.7314	0.4498	0.0453	0.4951	34.8526	2,466.5054	2,501.3580	2.2653	0.0128	2,552.8885

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	0.2116	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-003	1.1000e-003	0.0000	0.0000	1.1700e-003
Energy	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	516.0149	516.0149	0.0176	6.9200e-003	518.5310
Mobile	1.4538	2.6056	12.6446	0.0236	1.6836	0.0319	1.7155	0.4498	0.0293	0.4791	0.0000	1,918.9221	1,918.9221	0.0868	0.0000	1,920.7451
Waste						0.0000	0.0000		0.0000	0.0000	32.5658	0.0000	32.5658	1.9246	0.0000	72.9822
Water						0.0000	0.0000		0.0000	0.0000	2.2868	31.5674	33.8541	0.2363	5.8400e-003	40.6255
Total	1.6884	2.8156	12.8216	0.0249	1.6836	0.0479	1.7314	0.4498	0.0453	0.4951	34.8526	2,466.5054	2,501.3580	2.2653	0.0128	2,552.8848

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Paving	Paving	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	6.00	125	0.42
Paving	Paving Equipment	0	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	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
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Paving - 2017

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4538	2.6056	12.6446	0.0236	1.6836	0.0319	1.7155	0.4498	0.0293	0.4791	0.0000	1,918.922 1	1,918.922 1	0.0868	0.0000	1,920.745 1
Unmitigated	1.4538	2.6056	12.6446	0.0236	1.6836	0.0319	1.7155	0.4498	0.0293	0.4791	0.0000	1,918.922 1	1,918.922 1	0.0868	0.0000	1,920.745 1

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	726.03	726.03	752.81	994,665	994,665
Medical Office Building	197.63	49.01	8.48	387,465	387,465
Quality Restaurant	915.15	915.15	915.15	1,302,838	1,302,838
Strip Mall	1,018.03	965.66	469.28	1,773,514	1,773,514
Total	2,856.84	2,655.85	2,145.71	4,458,482	4,458,482

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
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511437	0.057382	0.191336	0.153047	0.041226	0.005877	0.014979	0.013726	0.001416	0.002136	0.004703	0.000510	0.002224

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	287.3710	287.3710	0.0132	2.7300e-003	288.4957
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	287.3710	287.3710	0.0132	2.7300e-003	288.4957
NaturalGas Mitigated	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	228.6438	228.6438	4.3800e-003	4.1900e-003	230.0353
NaturalGas Unmitigated	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	228.6438	228.6438	4.3800e-003	4.1900e-003	230.0353

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					
Medical Office Building	52428.5	2.8000e-004	2.5700e-003	2.1600e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.7978	2.7978	5.0000e-005	5.0000e-005	2.8148
Quality Restaurant	2.68014e+006	0.0145	0.1314	0.1104	7.9000e-004		9.9800e-003	9.9800e-003		9.9800e-003	9.9800e-003	0.0000	143.0223	143.0223	2.7400e-003	2.6200e-003	143.8927
Strip Mall	47082.3	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5125	2.5125	5.0000e-005	5.0000e-005	2.5278
High Turnover (Sit Down Restaurant)	1.50498e+006	8.1200e-003	0.0738	0.0620	4.4000e-004		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	80.3112	80.3112	1.5400e-003	1.4700e-003	80.8000
Total		0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	228.6438	228.6438	4.3800e-003	4.1900e-003	230.0353

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					
Medical Office Building	52428.5	2.8000e-004	2.5700e-003	2.1600e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.7978	2.7978	5.0000e-005	5.0000e-005	2.8148
Quality Restaurant	2.68014e+006	0.0145	0.1314	0.1104	7.9000e-004		9.9800e-003	9.9800e-003		9.9800e-003	9.9800e-003	0.0000	143.0223	143.0223	2.7400e-003	2.6200e-003	143.8927
Strip Mall	47082.3	2.5000e-004	2.3100e-003	1.9400e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5125	2.5125	5.0000e-005	5.0000e-005	2.5278
High Turnover (Sit Down Restaurant)	1.50498e+006	8.1200e-003	0.0738	0.0620	4.4000e-004		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	80.3112	80.3112	1.5400e-003	1.4700e-003	80.8000
Total		0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	228.6438	228.6438	4.3800e-003	4.1900e-003	230.0353

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	224692	64.2995	2.9600e-003	6.1000e-004	64.5511
Medical Office Building	85394.5	24.4371	1.1200e-003	2.3000e-004	24.5327
Quality Restaurant	400143	114.5078	5.2600e-003	1.0900e-003	114.9559
Strip Mall	293978	84.1267	3.8700e-003	8.0000e-004	84.4559
Total		287.3710	0.0132	2.7300e-003	288.4957

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	224692	64.2995	2.9600e-003	6.1000e-004	64.5511
Medical Office Building	85394.5	24.4371	1.1200e-003	2.3000e-004	24.5327
Quality Restaurant	400143	114.5078	5.2600e-003	1.0900e-003	114.9559
Strip Mall	293978	84.1267	3.8700e-003	8.0000e-004	84.4559
Total		287.3710	0.0132	2.7300e-003	288.4957

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2116	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-003	1.1000e-003	0.0000	0.0000	1.1700e-003
Unmitigated	0.2116	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-003	1.1000e-003	0.0000	0.0000	1.1700e-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	0.0514					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-003	1.1000e-003	0.0000	0.0000	1.1700e-003
Total	0.2116	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-003	1.1000e-003	0.0000	0.0000	1.1700e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0514					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1602					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-003	1.1000e-003	0.0000	0.0000	1.1700e-003
Total	0.2116	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-003	1.1000e-003	0.0000	0.0000	1.1700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	33.8541	0.2363	5.8400e-003	40.6255
Unmitigated	33.8541	0.2363	5.8500e-003	40.6291

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	1.73318 / 0.110628	7.3597	0.0568	1.4000e-003	8.9857
Medical Office Building	0.686379 / 0.130739	3.1910	0.0225	5.6000e-004	3.8360
Quality Restaurant	3.08694 / 0.197039	13.1083	0.1012	2.4900e-003	16.0044
Strip Mall	1.70145 / 1.04282	10.1951	0.0559	1.4000e-003	11.8030
Total		33.8541	0.2363	5.8500e-003	40.6291

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	1.73318 / 0.110628	7.3597	0.0568	1.4000e-003	8.9849
Medical Office Building	0.686379 / 0.130739	3.1910	0.0225	5.6000e-004	3.8357
Quality Restaurant	3.08694 / 0.197039	13.1083	0.1011	2.4900e-003	16.0028
Strip Mall	1.70145 / 1.04282	10.1951	0.0559	1.4000e-003	11.8022
Total		33.8541	0.2363	5.8500e-003	40.6255

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	32.5658	1.9246	0.0000	72.9822
Mitigated	32.5658	1.9246	0.0000	72.9822

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	67.95	13.7932	0.8152	0.0000	30.9115
Medical Office Building	59.08	11.9927	0.7088	0.0000	26.8764
Quality Restaurant	9.28	1.8838	0.1113	0.0000	4.2216
Strip Mall	24.12	4.8961	0.2894	0.0000	10.9726
Total		32.5659	1.9246	0.0000	72.9822

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	67.95	13.7932	0.8152	0.0000	30.9115
Medical Office Building	59.08	11.9927	0.7088	0.0000	26.8764
Quality Restaurant	9.28	1.8838	0.1113	0.0000	4.2216
Strip Mall	24.12	4.8961	0.2894	0.0000	10.9726
Total		32.5659	1.9246	0.0000	72.9822

9.0 Operational Offroad

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