

**Westar Final Phase - Residential Construction
Santa Barbara-South of Santa Ynez Range County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	0.42	Acre	0.42	0.00	0
Apartments Mid Rise	33.00	Dwelling Unit	1.42	44,255.00	90

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Development of 33 apartment units totaling 44,255 square feet and a 0.42 acre park area on a 1.84 acre site.

Construction Phase - Default phasing assumed except for grading phase which would last 12 days.

Off-road Equipment - Default construction equipment assumed.

Off-road Equipment - Default construction equipment assumed.

Off-road Equipment - Default construction equipment assumed.

Off-road Equipment - Default construction equipment assumed.

Trips and VMT - 834 total trucks over haul period.

Grading - Export of 7,500 cubic yards of soil.

Architectural Coating - Comply with SBCAPCD's Rule 323.

Construction Off-road Equipment Mitigation - Water exposed surface areas twice daily. Reduce vehicle speeds to 15 mph.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblConstructionPhase	NumDays	4.00	12.00
tblGrading	MaterialExported	0.00	7,500.00
tblLandUse	LandUseSquareFeet	18,295.20	0.00
tblLandUse	LandUseSquareFeet	33,000.00	44,255.00
tblLandUse	LotAcreage	0.87	1.42
tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	HaulingTripNumber	938.00	834.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	5.00	6.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.6136	2.2646	1.8888	2.9800e-003	0.0621	0.1354	0.1975	0.0238	0.1301	0.1540	0.0000	251.1944	251.1944	0.0444	0.0000	252.1267
Total	0.6136	2.2646	1.8888	2.9800e-003	0.0621	0.1354	0.1975	0.0238	0.1301	0.1540	0.0000	251.1944	251.1944	0.0444	0.0000	252.1267

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

2017	0.6136	2.2646	1.8888	2.9800e-003	0.0455	0.1354	0.1809	0.0155	0.1301	0.1456	0.0000	251.1942	251.1942	0.0444	0.0000	252.1265
Total	0.6136	2.2646	1.8888	2.9800e-003	0.0455	0.1354	0.1809	0.0155	0.1301	0.1456	0.0000	251.1942	251.1942	0.0444	0.0000	252.1265

	ROG	NOx	CO	SO2	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	26.62	0.00	8.37	35.17	0.00	5.44	0.00	0.00	0.00	0.00	0.00	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	Grading/Soil Export/Hauling	Grading	1/1/2017	1/17/2017	5	12	
2	Building Construction	Building Construction	1/18/2017	10/24/2017	5	200	
3	Paving	Paving	10/25/2017	11/7/2017	5	10	
4	Architectural Coating	Architectural Coating	11/8/2017	11/21/2017	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 89,616; Residential Outdoor: 29,872; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading/Soil Export/Hauling	Graders	1	6.00	174	0.41
Grading/Soil Export/Hauling	Rubber Tired Dozers	1	6.00	255	0.40
Grading/Soil Export/Hauling	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	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
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Grading/Soil Export/Hauling	3	8.00	0.00	834.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	24.00	4.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	14.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading/Soil Export/Hauling - 2017

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					0.0300	0.0000	0.0300	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.1187	0.0791	8.0000e-005		6.4000e-003	6.4000e-003		5.8800e-003	5.8800e-003	0.0000	7.8337	7.8337	2.4000e-003	0.0000	7.8841
Total	0.0113	0.1187	0.0791	8.0000e-005	0.0300	6.4000e-003	0.0364	0.0152	5.8800e-003	0.0211	0.0000	7.8337	7.8337	2.4000e-003	0.0000	7.8841

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0500e-003	0.1200	0.1287	3.1000e-004	7.0800e-003	1.4000e-003	8.4800e-003	1.9400e-003	1.2900e-003	3.2200e-003	0.0000	27.5510	27.5510	1.9000e-004	0.0000	27.5549
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	1.7000e-004	3.1000e-004	2.5700e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3466	0.3466	2.0000e-005	0.0000	0.3470
Total	9.2200e-003	0.1203	0.1313	3.1000e-004	7.5200e-003	1.4000e-003	8.9200e-003	2.0600e-003	1.2900e-003	3.3400e-003	0.0000	27.8976	27.8976	2.1000e-004	0.0000	27.9019

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					0.0135	0.0000	0.0135	6.8600e-003	0.0000	6.8600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.1187	0.0791	8.0000e-005		6.4000e-003	6.4000e-003		5.8800e-003	5.8800e-003	0.0000	7.8337	7.8337	2.4000e-003	0.0000	7.8841
Total	0.0113	0.1187	0.0791	8.0000e-005	0.0135	6.4000e-003	0.0199	6.8600e-003	5.8800e-003	0.0127	0.0000	7.8337	7.8337	2.4000e-003	0.0000	7.8841

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0500e-003	0.1200	0.1287	3.1000e-004	7.0800e-003	1.4000e-003	8.4800e-003	1.9400e-003	1.2900e-003	3.2200e-003	0.0000	27.5510	27.5510	1.9000e-004	0.0000	27.5549
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	1.7000e-004	3.1000e-004	2.5700e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3466	0.3466	2.0000e-005	0.0000	0.3470
Total	9.2200e-003	0.1203	0.1313	3.1000e-004	7.5200e-003	1.4000e-003	8.9200e-003	2.0600e-003	1.2900e-003	3.3400e-003	0.0000	27.8976	27.8976	2.1000e-004	0.0000	27.9019

3.3 Building Construction - 2017

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	0.2955	1.9109	1.4311	2.2000e-003		0.1226	0.1226		0.1182	0.1182	0.0000	184.5473	184.5473	0.0387	0.0000	185.3605
Total	0.2955	1.9109	1.4311	2.2000e-003		0.1226	0.1226		0.1182	0.1182	0.0000	184.5473	184.5473	0.0387	0.0000	185.3605

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	4.1000e-003	0.0274	0.0591	6.0000e-005	1.6300e-003	3.4000e-004	1.9700e-003	4.7000e-004	3.1000e-004	7.8000e-004	0.0000	5.4764	5.4764	4.0000e-005	0.0000	5.4773
Worker	8.6000e-003	0.0153	0.1285	2.4000e-004	0.0220	1.6000e-004	0.0221	5.8300e-003	1.5000e-004	5.9800e-003	0.0000	17.3280	17.3280	1.0100e-003	0.0000	17.3491
Total	0.0127	0.0427	0.1875	3.0000e-004	0.0236	5.0000e-004	0.0241	6.3000e-003	4.6000e-004	6.7600e-003	0.0000	22.8044	22.8044	1.0500e-003	0.0000	22.8264

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	0.2955	1.9109	1.4311	2.2000e-003		0.1226	0.1226		0.1182	0.1182	0.0000	184.5471	184.5471	0.0387	0.0000	185.3603
Total	0.2955	1.9109	1.4311	2.2000e-003		0.1226	0.1226		0.1182	0.1182	0.0000	184.5471	184.5471	0.0387	0.0000	185.3603

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	4.1000e-003	0.0274	0.0591	6.0000e-005	1.6300e-003	3.4000e-004	1.9700e-003	4.7000e-004	3.1000e-004	7.8000e-004	0.0000	5.4764	5.4764	4.0000e-005	0.0000	5.4773
Worker	8.6000e-003	0.0153	0.1285	2.4000e-004	0.0220	1.6000e-004	0.0221	5.8300e-003	1.5000e-004	5.9800e-003	0.0000	17.3280	17.3280	1.0100e-003	0.0000	17.3491
Total	0.0127	0.0427	0.1875	3.0000e-004	0.0236	5.0000e-004	0.0241	6.3000e-003	4.6000e-004	6.7600e-003	0.0000	22.8044	22.8044	1.0500e-003	0.0000	22.8264

3.4 Paving - 2017

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	5.9300e-003	0.0605	0.0452	7.0000e-005		3.6700e-003	3.6700e-003		3.3800e-003	3.3800e-003	0.0000	6.1129	6.1129	1.8400e-003	0.0000	6.1515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.9300e-003	0.0605	0.0452	7.0000e-005		3.6700e-003	3.6700e-003		3.3800e-003	3.3800e-003	0.0000	6.1129	6.1129	1.8400e-003	0.0000	6.1515

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	2.5000e-004	4.5000e-004	3.7500e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5054	0.5054	3.0000e-005	0.0000	0.5060
Total	2.5000e-004	4.5000e-004	3.7500e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5054	0.5054	3.0000e-005	0.0000	0.5060

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	5.9300e-003	0.0605	0.0452	7.0000e-005		3.6700e-003	3.6700e-003		3.3800e-003	3.3800e-003	0.0000	6.1129	6.1129	1.8400e-003	0.0000	6.1515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.9300e-003	0.0605	0.0452	7.0000e-005		3.6700e-003	3.6700e-003		3.3800e-003	3.3800e-003	0.0000	6.1129	6.1129	1.8400e-003	0.0000	6.1515

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	2.5000e-004	4.5000e-004	3.7500e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5054	0.5054	3.0000e-005	0.0000	0.5060
Total	2.5000e-004	4.5000e-004	3.7500e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5054	0.5054	3.0000e-005	0.0000	0.5060

3.5 Architectural Coating - 2017

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	0.2769					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2795
Total	0.2786	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2795

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.9000e-004	1.6100e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2166	0.2166	1.0000e-005	0.0000	0.2169
Total	1.1000e-004	1.9000e-004	1.6100e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2166	0.2166	1.0000e-005	0.0000	0.2169

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	0.2769					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2795
Total	0.2786	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2795

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.9000e-004	1.6100e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2166	0.2166	1.0000e-005	0.0000	0.2169

ATTACHMENT B

*CalEEMod Output –
Amended Project (2013)
Operational Emissions
Winter, Summer, and Annual Output*

Westar Final Phase
Santa Barbara-South of Santa Ynez Range County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	299.00	Dwelling Unit	15.41	435,578.00	813
Regional Shopping Center	75.90	1000sqft	8.15	75,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2013
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Development of 299 apartment units and 75,900 square feet dedicated for retail on a 23.558 acre site.

Vehicle Trips - Updated trip rate according to traffic analysis.

Water And Wastewater -

Energy Mitigation - Exceed Title 24 by 15%.

Area Coating - Coatings must be low-VOC.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblLandUse	LandUseSquareFeet	299,000.00	435,578.00
tblLandUse	LotAcreage	7.87	15.41
tblLandUse	LotAcreage	1.74	8.15
tblProjectCharacteristics	OperationalYear	2014	2013
tblVehicleTrips	ST_TR	7.16	4.20
tblVehicleTrips	ST_TR	49.97	47.83
tblVehicleTrips	SU_TR	6.07	4.20
tblVehicleTrips	SU_TR	25.24	47.83
tblVehicleTrips	WD_TR	6.59	4.20
tblVehicleTrips	WD_TR	42.94	47.83

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	lb/day										lb/day					
Area	13.4792	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338	0.0000	44.4338	44.4338	0.0487	0.0000	45.4568
Energy	0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558		880.2969	880.2969	0.0169	0.0161	885.6543

Mobile	26.0987	45.7665	242.2962	0.2236	16.6562	0.6380	17.2942	4.4520	0.5845	5.0365		20,877.78 22	20,877.782 2	1.4495		20,908.222 4
Total	39.6586	46.7618	268.0442	0.2293	16.6562	0.8275	17.4837	4.4520	0.7740	5.2260	0.0000	21,802.51 29	21,802.512 9	1.5151	0.0161	21,839.333 4

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	13.4792	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338	0.0000	44.4338	44.4338	0.0487	0.0000	45.4568
Energy	0.0712	0.6103	0.2758	3.8800e-003		0.0492	0.0492		0.0492	0.0492		776.1315	776.1315	0.0149	0.0142	780.8549
Mobile	26.0987	45.7665	242.2962	0.2236	16.6562	0.6380	17.2942	4.4520	0.5845	5.0365		20,877.78 22	20,877.782 2	1.4495		20,908.222 4
Total	39.6490	46.6800	268.0081	0.2288	16.6562	0.8209	17.4771	4.4520	0.7674	5.2194	0.0000	21,698.34 75	21,698.347 5	1.5131	0.0142	21,734.534 1

	ROG	NOx	CO	SO2	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	0.02	0.17	0.01	0.23	0.00	0.80	0.04	0.00	0.85	0.13	0.00	0.48	0.48	0.13	11.83	0.48

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	lb/day										lb/day					
Unmitigated	26.0987	45.7665	242.2962	0.2236	16.6562	0.6380	17.2942	4.4520	0.5845	5.0365		20,877.78 22	20,877.782 2	1.4495		20,908.222 4

4.2 Trip Summary Information

	Average Daily Trip Rate	Unmitigated	Mitigated
--	-------------------------	-------------	-----------

Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,255.80	1,255.80	1255.80	3,464,917	3,464,917
Regional Shopping Center	3,630.30	3,630.30	3630.30	4,396,506	4,396,506
Total	4,886.10	4,886.10	4,886.10	7,861,423	7,861,423

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	12.30	5.90	6.40	37.50	15.00	47.50	86	11	3
Regional Shopping Center	8.80	4.60	4.60	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.486947	0.036636	0.211979	0.158038	0.050617	0.007640	0.018339	0.012814	0.001896	0.002246	0.008054	0.001658	0.003136

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

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	0.0712	0.6103	0.2758	3.8800e-003		0.0492	0.0492		0.0492	0.0492		776.1315	776.1315	0.0149	0.0142	780.8549
NaturalGas Unmitigated	0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558		880.2969	880.2969	0.0169	0.0161	885.6543

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Mid Rise	7056.24	0.0761	0.6503	0.2767	4.1500e-003		0.0526	0.0526		0.0526	0.0526			830.1454	830.1454	0.0159	0.0152	835.1976
Regional Shopping Center	426.288	4.6000e-003	0.0418	0.0351	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003			50.1515	50.1515	9.6000e-004	9.2000e-004	50.4567
Total		0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558			880.2969	880.2969	0.0169	0.0161	885.6543

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Mid Rise	6.20202	0.0669	0.5716	0.2432	3.6500e-003		0.0462	0.0462		0.0462	0.0462			729.6496	729.6496	0.0140	0.0134	734.0902
Regional Shopping Center	0.395096	4.2600e-003	0.0387	0.0325	2.3000e-004		2.9400e-003	2.9400e-003		2.9400e-003	2.9400e-003			46.4819	46.4819	8.9000e-004	8.5000e-004	46.7648
Total		0.0711	0.6103	0.2758	3.8800e-003		0.0492	0.0492		0.0492	0.0492			776.1315	776.1315	0.0149	0.0142	780.8549

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	lb/day										lb/day					
Unmitigated	13.4792	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338	0.0000	44.4338	44.4338	0.0487	0.0000	45.4568

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					

Architectural Coating	1.6862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.9456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8474	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338		44.4338	44.4338	0.0487		45.4568
Total	13.4792	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338	0.0000	44.4338	44.4338	0.0487	0.0000	45.4568

Westar Final Phase
Santa Barbara-South of Santa Ynez Range County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	299.00	Dwelling Unit	15.41	435,578.00	813
Regional Shopping Center	75.90	1000sqft	8.15	75,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2013
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Development of 299 apartment units and 75,900 square feet dedicated for retail on a 23.558 acre site.

Vehicle Trips - Updated trip rate according to traffic analysis.

Energy Mitigation - Exceed Title 24 by 15%.

Area Coating - Coatings must be low-VOC.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblLandUse	LandUseSquareFeet	299,000.00	435,578.00
tblLandUse	LotAcreage	7.87	15.41
tblLandUse	LotAcreage	1.74	8.15
tblProjectCharacteristics	OperationalYear	2014	2013
tblVehicleTrips	ST_TR	7.16	4.20
tblVehicleTrips	ST_TR	49.97	47.83
tblVehicleTrips	SU_TR	6.07	4.20
tblVehicleTrips	SU_TR	25.24	47.83
tblVehicleTrips	WD_TR	6.59	4.20
tblVehicleTrips	WD_TR	42.94	47.83

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	lb/day										lb/day					
Area	13.4792	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338	0.0000	44.4338	44.4338	0.0487	0.0000	45.4568

Energy	0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558		880.2969	880.2969	0.0169	0.0161	885.6543
Mobile	23.1441	42.6329	208.7352	0.2273	16.6562	0.6286	17.2848	4.4520	0.5758	5.0278		21,271.8813	21,271.8813	1.4485		21,302.3007
Total	36.7040	43.6282	234.4832	0.2330	16.6562	0.8181	17.4743	4.4520	0.7654	5.2173	0.0000	22,196.6120	22,196.6120	1.5141	0.0161	22,233.4117

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	13.4792	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338	0.0000	44.4338	44.4338	0.0487	0.0000	45.4568
Energy	0.0712	0.6103	0.2758	3.8800e-003		0.0492	0.0492		0.0492	0.0492		776.1315	776.1315	0.0149	0.0142	780.8549
Mobile	23.1441	42.6329	208.7352	0.2273	16.6562	0.6286	17.2848	4.4520	0.5758	5.0278		21,271.8813	21,271.8813	1.4485		21,302.3007
Total	36.6945	43.5464	234.4471	0.2324	16.6562	0.8115	17.4677	4.4520	0.7588	5.2107	0.0000	22,092.4465	22,092.4465	1.5121	0.0142	22,128.6124

	ROG	NOx	CO	SO2	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	0.03	0.19	0.02	0.22	0.00	0.81	0.04	0.00	0.86	0.13	0.00	0.47	0.47	0.13	11.83	0.47

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	lb/day										lb/day					
Unmitigated	23.1441	42.6329	208.7352	0.2273	16.6562	0.6286	17.2848	4.4520	0.5758	5.0278		21,271.8813	21,271.8813	1.4485		21,302.3007

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,255.80	1,255.80	1255.80	3,464,917	3,464,917
Regional Shopping Center	3,630.30	3,630.30	3630.30	4,396,506	4,396,506
Total	4,886.10	4,886.10	4,886.10	7,861,423	7,861,423

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	12.30	5.90	6.40	37.50	15.00	47.50	86	11	3
Regional Shopping Center	8.80	4.60	4.60	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.486947	0.036636	0.211979	0.158038	0.050617	0.007640	0.018339	0.012814	0.001896	0.002246	0.008054	0.001658	0.003136

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

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	
NaturalGas Mitigated	0.0712	0.6103	0.2758	3.8800e-003		0.0492	0.0492		0.0492	0.0492			776.1315	776.1315	0.0149	0.0142	780.8549
NaturalGas Unmitigated	0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558			880.2969	880.2969	0.0169	0.0161	885.6543

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	7056.24	0.0761	0.6503	0.2767	4.1500e-003		0.0526	0.0526		0.0526	0.0526		830.1454	830.1454	0.0159	0.0152	835.1976
Regional Shopping Center	426.288	4.6000e-003	0.0418	0.0351	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003		50.1515	50.1515	9.6000e-004	9.2000e-004	50.4567
Total		0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558		880.2969	880.2969	0.0169	0.0161	885.6543

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Regional Shopping Center	0.395096	4.2600e-003	0.0387	0.0325	2.3000e-004		2.9400e-003	2.9400e-003		2.9400e-003	2.9400e-003		46.4819	46.4819	8.9000e-004	8.5000e-004	46.7648
Apartments Mid Rise	6.20202	0.0669	0.5716	0.2432	3.6500e-003		0.0462	0.0462		0.0462	0.0462		729.6496	729.6496	0.0140	0.0134	734.0902
Total		0.0711	0.6103	0.2758	3.8800e-003		0.0492	0.0492		0.0492	0.0492		776.1315	776.1315	0.0149	0.0142	780.8549

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	lb/day										lb/day					
Unmitigated	13.4792	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338	0.0000	44.4338	44.4338	0.0487	0.0000	45.4568

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					

Architectural Coating	1.6862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.9456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8474	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338		44.4338	44.4338	0.0487		45.4568
Total	13.4792	0.3032	25.4361	1.3000e-003		0.1338	0.1338		0.1338	0.1338	0.0000	44.4338	44.4338	0.0487	0.0000	45.4568

Westar Final Phase
Santa Barbara-South of Santa Ynez Range County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	299.00	Dwelling Unit	15.41	435,578.00	813
Regional Shopping Center	75.90	1000sqft	8.15	75,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2013
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Development of 299 apartment units and 75,900 square feet dedicated for retail on a 23.558 acre site.

Vehicle Trips - Updated trip rate according to traffic analysis.

Water And Wastewater -

Energy Mitigation - Exceed Title 24 by 15%.

Area Coating - Coatings must be low-VOC.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblLandUse	LandUseSquareFeet	299,000.00	435,578.00
tblLandUse	LotAcreage	7.87	15.41
tblLandUse	LotAcreage	1.74	8.15
tblProjectCharacteristics	OperationalYear	2014	2013
tblVehicleTrips	ST_TR	7.16	4.20
tblVehicleTrips	ST_TR	49.97	47.83
tblVehicleTrips	SU_TR	6.07	4.20
tblVehicleTrips	SU_TR	25.24	47.83
tblVehicleTrips	WD_TR	6.59	4.20
tblVehicleTrips	WD_TR	42.94	47.83

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	2.3816	0.0273	2.2893	1.2000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	3.6279	3.6279	3.9800e-003	0.0000	3.7114
Energy	0.0147	0.1263	0.0569	8.0000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	721.4230	721.4230	0.0293	8.1500e-003	724.5629

Mobile	4.4160	8.2950	41.4272	0.0407	2.9656	0.1150	3.0806	0.7941	0.1053	0.8994	0.0000	3,449.4422	3,449.4422	0.2390	0.0000	3,454.4602
Waste						0.0000	0.0000		0.0000	0.0000	44.0978	0.0000	44.0978	2.6061	0.0000	98.8259
Water						0.0000	0.0000		0.0000	0.0000	8.8815	54.6232	63.5048	0.0331	0.0198	70.3480
Total	6.8123	8.4486	43.7734	0.0416	2.9656	0.1372	3.1028	0.7941	0.1276	0.9216	52.9793	4,229.1163	4,282.0956	2.9114	0.0280	4,351.9083

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	2.3816	0.0273	2.2893	1.2000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	3.6279	3.6279	3.9800e-003	0.0000	3.7114
Energy	0.0130	0.1114	0.0503	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003	0.0000	690.1800	690.1800	0.0283	7.7000e-003	693.1602
Mobile	4.4160	8.2950	41.4272	0.0407	2.9656	0.1150	3.0806	0.7941	0.1053	0.8994	0.0000	3,449.4422	3,449.4422	0.2390	0.0000	3,454.4602
Waste						0.0000	0.0000		0.0000	0.0000	44.0978	0.0000	44.0978	2.6061	0.0000	98.8259
Water						0.0000	0.0000		0.0000	0.0000	8.8815	54.6232	63.5048	0.0329	0.0198	70.3338
Total	6.8105	8.4337	43.7668	0.0415	2.9656	0.1360	3.1016	0.7941	0.1264	0.9204	52.9793	4,197.8733	4,250.8526	2.9102	0.0275	4,320.4914

	ROG	NOx	CO	SO2	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	0.03	0.18	0.02	0.22	0.00	0.87	0.04	0.00	0.94	0.13	0.00	0.74	0.73	0.04	1.72	0.72

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					
Unmitigated	4.4160	8.2950	41.4272	0.0407	2.9656	0.1150	3.0806	0.7941	0.1053	0.8994	0.0000	3,449.4422	3,449.4422	0.2390	0.0000	3,454.4602

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,255.80	1,255.80	1255.80	3,464,917	3,464,917
Regional Shopping Center	3,630.30	3,630.30	3630.30	4,396,506	4,396,506
Total	4,886.10	4,886.10	4,886.10	7,861,423	7,861,423

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	12.30	5.90	6.40	37.50	15.00	47.50	86	11	3
Regional Shopping Center	8.80	4.60	4.60	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.486947	0.036636	0.211979	0.158038	0.050617	0.007640	0.018339	0.012814	0.001896	0.002246	0.008054	0.001658	0.003136

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	561.6827	561.6827	0.0258	5.3400e-003	563.8809
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	575.6800	575.6800	0.0265	5.4700e-003	577.9329
NaturalGas Mitigated	0.0130	0.1114	0.0503	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003	0.0000	128.4973	128.4973	2.4600e-003	2.3600e-003	129.2793
NaturalGas Unmitigated	0.0147	0.1263	0.0569	8.0000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	145.7430	145.7430	2.7900e-003	2.6700e-003	146.6300

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.57553e+006	0.0139	0.1187	0.0505	7.6000e-004		9.6000e-003	9.6000e-003		9.6000e-003	9.6000e-003	0.0000	137.4399	137.4399	2.6300e-003	2.5200e-003	138.2763
Regional Shopping Center	155595	8.4000e-004	7.6300e-003	6.4100e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3031	8.3031	1.6000e-004	1.5000e-004	8.3537
Total		0.0147	0.1263	0.0569	8.1000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	145.7430	145.7430	2.7900e-003	2.6700e-003	146.6300

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					
Regional Shopping Center	144210	7.8000e-004	7.0700e-003	5.9400e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.6956	7.6956	1.5000e-004	1.4000e-004	7.7424
Apartments Mid Rise	2.26374e+006	0.0122	0.1043	0.0444	6.7000e-004		8.4300e-003	8.4300e-003		8.4300e-003	8.4300e-003	0.0000	120.8017	120.8017	2.3200e-003	2.2100e-003	121.5369
Total		0.0130	0.1114	0.0503	7.1000e-004		8.9700e-003	8.9700e-003		8.9700e-003	8.9700e-003	0.0000	128.4973	128.4973	2.4700e-003	2.3500e-003	129.2793

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04017e+006	297.6631	0.0137	2.8300e-003	298.8280
Regional Shopping Center	971520	278.0169	0.0128	2.6400e-003	279.1049
Total		575.6800	0.0265	5.4700e-003	577.9329

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.03202e+006	295.3295	0.0136	2.8100e-003	296.4853
Regional Shopping Center	930762	266.3532	0.0122	2.5300e-003	267.3956
Total		561.6827	0.0258	5.3400e-003	563.8809

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					
Unmitigated	2.3816	0.0273	2.2893	1.2000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	3.6279	3.6279	3.9800e-003	0.0000	3.7114

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	0.3077					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0763	0.0273	2.2893	1.2000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	3.6279	3.6279	3.9800e-003	0.0000	3.7114
Total	2.3816	0.0273	2.2893	1.2000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	3.6279	3.6279	3.9800e-003	0.0000	3.7114

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	63.5048	0.0331	0.0198	70.3480

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	19.4811 / 12.2815	49.3588	0.0257	0.0154	54.6697
Regional Shopping Center	5.6221 / 3.44581	14.1459	7.4100e-003	4.4400e-003	15.6782
Total		63.5048	0.0331	0.0198	70.3480

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	44.0978	2.6061	0.0000	98.8259

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	137.54	27.9194	1.6500	0.0000	62.5691
Regional Shopping Center	79.7	16.1784	0.9561	0.0000	36.2568
Total		44.0978	2.6061	0.0000	98.8259

ATTACHMENT C

*CalEEMod Output –
Amended Project (2017)
Operational Emissions
Winter, Summer, and Annual Output*

Westar Final Phase
Santa Barbara-South of Santa Ynez Range County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	299.00	Dwelling Unit	15.41	435,578.00	813
Regional Shopping Center	75.90	1000sqft	8.15	75,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Land Use - Development of 299 apartment units and 75,900 square feet dedicated for retail on a 23.558 acre site.
- Vehicle Trips - Updated trip rate according to traffic analysis.
- Area Coating - Coatings must be low-VOC.
- Mobile Land Use Mitigation - Existing project site conditions.
- Energy Mitigation - Exceed Title 24 by 25%.
- Water Mitigation - Reduce water consumption by 20%.
- Waste Mitigation - 75% waste diversion goal by 2020 consistent with AB 341 (not mitigation)

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstructionPhase	NumDays	370.00	230.00
tblConstructionPhase	NumDays	35.00	20.00
tblLandUse	LandUseSquareFeet	299,000.00	435,578.00
tblLandUse	LotAcreage	7.87	15.41
tblLandUse	LotAcreage	1.74	8.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	VendorTripNumber	44.00	43.00
tblTripsAndVMT	WorkerTripNumber	240.00	237.00
tblTripsAndVMT	WorkerTripNumber	48.00	47.00
tblVehicleTrips	ST_TR	7.16	4.20
tblVehicleTrips	ST_TR	49.97	47.83
tblVehicleTrips	SU_TR	6.07	4.20
tblVehicleTrips	SU_TR	25.24	47.83
tblVehicleTrips	WD_TR	6.59	4.20
tblVehicleTrips	WD_TR	42.94	47.83

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	lb/day										lb/day					
Area	13.4084	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353	0.0000	44.4338	44.4338	0.0446	0.0000	45.3709
Energy	0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558		880.2969	880.2969	0.0169	0.0161	885.6543
Mobile	17.1295	31.2507	160.0926	0.2243	16.6625	0.3357	16.9981	4.4543	0.3087	4.7630		18,923.9255	18,923.9255	0.9510		18,943.8955
Total	30.6186	32.2333	185.3286	0.2300	16.6625	0.5267	17.1892	4.4543	0.4998	4.9540	0.0000	19,848.6562	19,848.6562	1.0125	0.0161	19,874.9207

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	13.4084	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353	0.0000	44.4338	44.4338	0.0446	0.0000	45.3709
Energy	0.0648	0.5558	0.2517	3.5300e-003		0.0448	0.0448		0.0448	0.0448		706.6879	706.6879	0.0135	0.0130	710.9887

Mobile	16.0784	25.2168	137.6109	0.1699	12.3774	0.2612	12.6386	3.3088	0.2402	3.5490		14,312.27 66	14,312.276 6	0.7550		14,328.130 6
Total	29.5516	26.0631	162.7869	0.1747	12.3774	0.4413	12.8187	3.3088	0.4203	3.7291	0.0000	15,063.39 82	15,063.398 2	0.8131	0.0130	15,084.490 2

	ROG	NOx	CO	SO2	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	3.48	19.14	12.16	24.05	25.72	16.22	25.43	25.72	15.90	24.73	0.00	24.11	24.11	19.69	19.70	24.10

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	16.0784	25.2168	137.6109	0.1699	12.3774	0.2612	12.6386	3.3088	0.2402	3.5490		14,312.27 66	14,312.276 6	0.7550		14,328.130 6
Unmitigated	17.1295	31.2507	160.0926	0.2243	16.6625	0.3357	16.9981	4.4543	0.3087	4.7630		18,923.92 55	18,923.925 5	0.9510		18,943.895 5

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,255.80	1,255.80	1255.80	3,464,917	2,573,846
Regional Shopping Center	3,630.30	3,630.30	3630.30	4,396,506	3,265,858
Total	4,886.10	4,886.10	4,886.10	7,861,423	5,839,704

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	12.30	5.90	6.40	37.50	15.00	47.50	86	11	3
Regional Shopping Center	8.80	4.60	4.60	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488515	0.036101	0.211699	0.155053	0.049887	0.007463	0.020047	0.014289	0.001917	0.002185	0.008106	0.001606	0.003132

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

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	0.0648	0.5558	0.2517	3.5300e-003		0.0448	0.0448		0.0448	0.0448		706.6879	706.6879	0.0135	0.0130	710.9887
NaturalGas Unmitigated	0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558		880.2969	880.2969	0.0169	0.0161	885.6543

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					
Regional Shopping Center	426.288	4.6000e-003	0.0418	0.0351	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003		50.1515	50.1515	9.6000e-004	9.2000e-004	50.4567
Apartments Mid Rise	7056.24	0.0761	0.6503	0.2767	4.1500e-003		0.0526	0.0526		0.0526	0.0526		830.1454	830.1454	0.0159	0.0152	835.1976
Total		0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558		880.2969	880.2969	0.0169	0.0161	885.6543

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Mid Rise	5.63255	0.0607	0.5191	0.2209	3.3100e-003		0.0420	0.0420		0.0420	0.0420			662.6524	662.6524	0.0127	0.0122	666.6852
Regional Shopping Center	0.374301	4.0400e-003	0.0367	0.0308	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003			44.0355	44.0355	8.4000e-004	8.1000e-004	44.3035
Total		0.0648	0.5558	0.2517	3.5300e-003		0.0448	0.0448		0.0448	0.0448			706.6879	706.6879	0.0135	0.0130	710.9887

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	lb/day										lb/day						
Unmitigated	13.4084	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353	0.0000	44.4338	44.4338	0.0446	0.0000	45.3709	

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						

Architectural Coating	1.6862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.9456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.7766	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353		44.4338	44.4338	0.0446		45.3709
Total	13.4084	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353	0.0000	44.4338	44.4338	0.0446	0.0000	45.3709

Westar Final Phase
Santa Barbara-South of Santa Ynez Range County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	299.00	Dwelling Unit	15.41	435,578.00	813
Regional Shopping Center	75.90	1000sqft	8.15	75,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Development of 299 apartment units and 75,900 square feet dedicated for retail on a 23.558 acre site.

Vehicle Trips - Updated trip rate according to traffic analysis.

Area Coating - Coatings must be low-VOC.

Mobile Land Use Mitigation - Existing project site conditions.

Energy Mitigation - Exceed Title 24 by 25%.

Water Mitigation - Reduce water consumption by 20%.

Waste Mitigation - 75% waste diversion goal by 2020 consistent with AB 341 (not mitigation)

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstructionPhase	NumDays	370.00	230.00
tblConstructionPhase	NumDays	35.00	20.00
tblLandUse	LandUseSquareFeet	299,000.00	435,578.00
tblLandUse	LotAcreage	7.87	15.41
tblLandUse	LotAcreage	1.74	8.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	VendorTripNumber	44.00	43.00
tblTripsAndVMT	WorkerTripNumber	240.00	237.00
tblTripsAndVMT	WorkerTripNumber	48.00	47.00
tblVehicleTrips	ST_TR	7.16	4.20
tblVehicleTrips	ST_TR	49.97	47.83
tblVehicleTrips	SU_TR	6.07	4.20
tblVehicleTrips	SU_TR	25.24	47.83
tblVehicleTrips	WD_TR	6.59	4.20
tblVehicleTrips	WD_TR	42.94	47.83

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	14.3705	23.6089	114.4924	0.1728	12.3774	0.2581	12.6355	3.3088	0.2374	3.5461		14,583.7288	14,583.7288	0.7542		14,599.5662
Unmitigated	15.4081	29.2192	136.9381	0.2282	16.6625	0.3325	16.9950	4.4543	0.3058	4.7601		19,277.7980	19,277.7980	0.9502		19,297.7513

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,255.80	1,255.80	1255.80	3,464,917	2,573,846
Regional Shopping Center	3,630.30	3,630.30	3630.30	4,396,506	3,265,858
Total	4,886.10	4,886.10	4,886.10	7,861,423	5,839,704

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	12.30	5.90	6.40	37.50	15.00	47.50	86	11	3
Regional Shopping Center	8.80	4.60	4.60	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488515	0.036101	0.211699	0.155053	0.049887	0.007463	0.020047	0.014289	0.001917	0.002185	0.008106	0.001606	0.003132

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0648	0.5558	0.2517	3.5300e-003		0.0448	0.0448		0.0448	0.0448		706.6879	706.6879	0.0135	0.0130	710.9887
NaturalGas Unmitigated	0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558		880.2969	880.2969	0.0169	0.0161	885.6543

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					
Regional Shopping Center	426.288	4.6000e-003	0.0418	0.0351	2.5000e-004		3.1800e-003	3.1800e-003		3.1800e-003	3.1800e-003		50.1515	50.1515	9.6000e-004	9.2000e-004	50.4567

Apartments Mid Rise	7056.24	0.0761	0.6503	0.2767	4.1500e-003		0.0526	0.0526		0.0526	0.0526		830.1454	830.1454	0.0159	0.0152	835.1976
Total		0.0807	0.6921	0.3118	4.4000e-003		0.0558	0.0558		0.0558	0.0558		880.2969	880.2969	0.0169	0.0161	885.6543

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Mid Rise	5.63255	0.0607	0.5191	0.2209	3.3100e-003		0.0420	0.0420		0.0420	0.0420			662.6524	662.6524	0.0127	0.0122	666.6852
Regional Shopping Center	0.374301	4.0400e-003	0.0367	0.0308	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003			44.0355	44.0355	8.4000e-004	8.1000e-004	44.3035
Total		0.0648	0.5558	0.2517	3.5300e-003		0.0448	0.0448		0.0448	0.0448			706.6879	706.6879	0.0135	0.0130	710.9887

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	lb/day										lb/day					
Mitigated	13.4084	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353	0.0000	44.4338	44.4338	0.0446	0.0000	45.3709
Unmitigated	13.4084	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353	0.0000	44.4338	44.4338	0.0446	0.0000	45.3709

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.9456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Landscaping	0.7766	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353		44.4338	44.4338	0.0446		45.3709
Total	13.4084	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353	0.0000	44.4338	44.4338	0.0446	0.0000	45.3709

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.9456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.7766	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353		44.4338	44.4338	0.0446		45.3709
Total	13.4084	0.2905	24.9243	1.3000e-003		0.1353	0.1353		0.1353	0.1353	0.0000	44.4338	44.4338	0.0446	0.0000	45.3709

Westar Final Phase
Santa Barbara-South of Santa Ynez Range County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	299.00	Dwelling Unit	15.41	435,578.00	813
Regional Shopping Center	75.90	1000sqft	8.15	75,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2017
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

- Land Use - Development of 299 apartment units and 75,900 square feet dedicated for retail on a 23.558 acre site.
- Vehicle Trips - Updated trip rate according to traffic analysis.
- Area Coating - Coatings must be low-VOC.
- Mobile Land Use Mitigation - Existing project site conditions.
- Energy Mitigation - Exceed Title 24 by 25%.
- Water Mitigation - Reduce water consumption by 20%.
- Waste Mitigation - 75% waste diversion goal by 2020 consistent with AB 341 (not mitigation)

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstructionPhase	NumDays	370.00	230.00
tblConstructionPhase	NumDays	35.00	20.00
tblLandUse	LandUseSquareFeet	299,000.00	435,578.00
tblLandUse	LotAcreage	7.87	15.41
tblLandUse	LotAcreage	1.74	8.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	VendorTripNumber	44.00	43.00
tblTripsAndVMT	WorkerTripNumber	240.00	237.00
tblTripsAndVMT	WorkerTripNumber	48.00	47.00
tblVehicleTrips	ST_TR	7.16	4.20
tblVehicleTrips	ST_TR	49.97	47.83
tblVehicleTrips	SU_TR	6.07	4.20
tblVehicleTrips	SU_TR	25.24	47.83
tblVehicleTrips	WD_TR	6.59	4.20
tblVehicleTrips	WD_TR	42.94	47.83

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	2.3752	0.0262	2.2432	1.2000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	3.6279	3.6279	3.6400e-003	0.0000	3.7044
Energy	0.0147	0.1263	0.0569	8.0000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	721.4230	721.4230	0.0293	8.1500e-003	724.5629
Mobile	2.9129	5.6678	27.2850	0.0408	2.9667	0.0607	3.0274	0.7945	0.0558	0.8503	0.0000	3,127.0361	3,127.0361	0.1568	0.0000	3,130.3278
Waste						0.0000	0.0000		0.0000	0.0000	44.0978	0.0000	44.0978	2.6061	0.0000	98.8259
Water						0.0000	0.0000		0.0000	0.0000	8.8815	54.6232	63.5048	0.0331	0.0198	70.3480
Total	5.3029	5.8203	29.5851	0.0417	2.9667	0.0830	3.0498	0.7945	0.0782	0.8727	52.9793	3,906.7102	3,959.6895	2.8288	0.0280	4,027.7689

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					

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	2.7230	4.5694	23.2445	0.0309	2.2038	0.0472	2.2509	0.5902	0.0434	0.6336	0.0000	2,365.7325	2,365.7325	0.1244	0.0000	2,368.3454
Unmitigated	2.9129	5.6678	27.2850	0.0408	2.9667	0.0607	3.0274	0.7945	0.0558	0.8503	0.0000	3,127.0361	3,127.0361	0.1568	0.0000	3,130.3278

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,255.80	1,255.80	1255.80	3,464,917	2,573,846
Regional Shopping Center	3,630.30	3,630.30	3630.30	4,396,506	3,265,858
Total	4,886.10	4,886.10	4,886.10	7,861,423	5,839,704

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	12.30	5.90	6.40	37.50	15.00	47.50	86	11	3
Regional Shopping Center	8.80	4.60	4.60	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488515	0.036101	0.211699	0.155053	0.049887	0.007463	0.020047	0.014289	0.001917	0.002185	0.008106	0.001606	0.003132

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	552.3512	552.3512	0.0254	5.2500e-003	554.5129
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	575.6800	575.6800	0.0265	5.4700e-003	577.9329
NaturalGas Mitigated	0.0118	0.1014	0.0459	6.4000e-004		8.1700e-003	8.1700e-003		8.1700e-003	8.1700e-003	0.0000	117.0001	117.0001	2.2400e-003	2.1500e-003	117.7122
NaturalGas Unmitigated	0.0147	0.1263	0.0569	8.0000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	145.7430	145.7430	2.7900e-003	2.6700e-003	146.6300

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.57553e+006	0.0139	0.1187	0.0505	7.6000e-004		9.6000e-003	9.6000e-003		9.6000e-003	9.6000e-003	0.0000	137.4399	137.4399	2.6300e-003	2.5200e-003	138.2763
Regional Shopping Center	155595	8.4000e-004	7.6300e-003	6.4100e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3031	8.3031	1.6000e-004	1.5000e-004	8.3537
Total		0.0147	0.1263	0.0569	8.1000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	145.7430	145.7430	2.7900e-003	2.6700e-003	146.6300

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.05588e+006	0.0111	0.0947	0.0403	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003	0.0000	109.7095	109.7095	2.1000e-003	2.0100e-003	110.3772
Regional Shopping Center	136620	7.4000e-004	6.7000e-003	5.6300e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.2906	7.2906	1.4000e-004	1.3000e-004	7.3349
Total		0.0118	0.1014	0.0459	6.4000e-004		8.1700e-003	8.1700e-003		8.1700e-003	8.1700e-003	0.0000	117.0001	117.0001	2.2400e-003	2.1400e-003	117.7121

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.04017e+006	297.6631	0.0137	2.8300e-003	298.8280
Regional Shopping Center	971520	278.0169	0.0128	2.6400e-003	279.1049
Total		575.6800	0.0265	5.4700e-003	577.9329

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.02658e+006	293.7738	0.0135	2.7900e-003	294.9235
Regional Shopping Center	903590	258.5774	0.0119	2.4600e-003	259.5893
Total		552.3512	0.0254	5.2500e-003	554.5128

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					
Unmitigated	2.3752	0.0262	2.2432	1.2000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	3.6279	3.6279	3.6400e-003	0.0000	3.7044

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	0.3077					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0699	0.0262	2.2432	1.2000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	3.6279	3.6279	3.6400e-003	0.0000	3.7044
Total	2.3752	0.0262	2.2432	1.2000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	3.6279	3.6279	3.6400e-003	0.0000	3.7044

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	47.9073	0.0263	0.0158	53.3706
Unmitigated	63.5048	0.0331	0.0198	70.3480

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	19.4811 / 12.2815	49.3588	0.0257	0.0154	54.6697

Regional Shopping Center	5.6221 / 3.44581	14.1459	7.4100e-003	4.4400e-003	15.6782
Total		63.5048	0.0331	0.0198	70.3480

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	15.5848 / 9.82523	37.2393	0.0204	0.0123	41.4792
Regional Shopping Center	4.49768 / 2.75664	10.6680	5.8900e-003	3.5500e-003	11.8913
Total		47.9073	0.0263	0.0158	53.3706

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.0244	0.6515	0.0000	24.7065
Unmitigated	44.0978	2.6061	0.0000	98.8259

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Land Use	tons	MT/yr			
Apartments Mid Rise	137.54	27.9194	1.6500	0.0000	62.5691
Regional Shopping Center	79.7	16.1784	0.9561	0.0000	36.2568
Total		44.0978	2.6061	0.0000	98.8259

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	34.385	6.9798	0.4125	0.0000	15.6423
Regional Shopping Center	19.925	4.0446	0.2390	0.0000	9.0642
Total		11.0244	0.6515	0.0000	24.7065