

Existing Annual VMT:

0

				Fuel	
Fleet Mix	auto	91%	0	gas (mpg)	23.17
	other	9%	0	diesel (mpg)	8.3
					<b>0.00</b>

Project Annual VMT:

1,356,601

Fleet Mix	auto	91%	1,234,507	gas (mpg)	23.17	53,280.40
	other	9%	122,094	diesel (mpg)	8.3	14,710.13
					Total Fuel	<b>67,990.53</b>

Net Project Annual VMT:

1,356,601

Fleet Mix	auto	91%	1,234,507	gas (mpg)	23.17	53,280.40
	other	9%	122,094	diesel (mpg)	8.3	14,710.13
					Total Fuel	<b>67,990.53</b>

Diesel MPG Source: EMFAC2021 (VMT/Fuel Consumption) **OPERATIONAL FUEL** **Total Gas/gallons** **106,560.80**  
 Gasoline MPG Source: EMFAC2021 (VMT/Fuel Consumption) **Total Diesel/gallons** **29,420.26**

**Worker Fuel (Gasoline, on-road)**

phase	trips	length (miles)	Days	total Miles	MPG	Gallons
Demolition	10	18.5	22	4,070	23.17	175.66
Site Preparation	5	18.5	22	2,035	23.17	87.83
Grading	7.5	18.5	44	6,105	23.17	263.49
Building Construction	67	18.5	325	402,838	23.17	17,386.17
Paving	17.5	18.5	22	7,123	23.17	307.40
Architectural Coating	13.4	18.5	63	15,618	23.17	674.05
Trenching	2.5	18.5	64	2,960	23.17	127.75
						<b>18,894.59</b>

**Vender Fuel (Diesel, on-road)**

phase	trips	length (miles)	days	total Miles	MPG	Gallons
Demolition	0	10.2	22	0	8.3	0.00
Site Preparation	0	10.2	22	0	8.3	0.00
Grading	0	10.2	44	0	8.3	0.00
Building Construction	26.2	10.2	325	86,853	8.3	10,464.22
Paving	0	10.2	22	0	8.3	0.00
Architectural Coating	0	10.2	63	0	8.3	0.00
Trenching	0	10.2	64	0	8.3	0.00
						<b>10,464.22</b>

**Haul Fuel (Diesel, on-road)**

phase	trips	length (miles)	days	total Miles	MPG	Gallons
Demolition	41.7	25	22	22,935	8.3	2,763.25
Site Preparation	0	20	22	0	8.3	0.00
Grading	281	25	44	309,100	8.3	37,240.96
Building Construction	0	20	325	0	8.3	0.00
Paving	0	20	22	0	8.3	0.00
Architectural Coating	0	20	63	0	8.3	0.00
Trenching	0	20	64	0	8.3	0.00
						<b>40,004.22</b>

**ON-ROAD CONSTRUCTION FUEL**

**Total On-Road Gas** **18,894.59**  
**Total On-Road Diesel** **50,468.43**

**Construction Equipment (Diesel, off-road)**

Phase	Equipment	Units	Hours	HP	Load Factor	Ave. Daily Load Factor	Days	HP Hours
Demolition	concrete/Industrial Saws	1	8	33	0.73	0.6	21	2,428.27
	Rubber Tired Dozers	1	8	367	0.4	0.6	21	14,797.44
	Tractors/Loaders/Backhoes	3	8	84	0.37	0.6	21	3,132.86
Site Preparation	Graders	1	8	148	0.41	0.6	22	6,407.81
	tractors/Loaders/Backhoes	1	8	84	0.37	0.6	22	3,282.05
	rubber Tired Dozers	1	7	367	0.4	0.6	22	13,564.32
Grading	Graders	1	8	148	0.41	0.6	44	12,815.62
	Rubber Tired Dozers	1	8	367	0.4	0.6	44	31,004.16
	Tractors/Loaders/Backhoes	2	7	84	0.37	0.6	44	5,743.58
Building Construction	cranes	1	6	367	0.29	0.6	325	124,523.10
	forklifts	1	6	82	0.2	0.6	325	19,188.00
	generator sets	1	8	14	0.74	0.6	325	16,161.60
	tractors/Loaders/Backhoes	1	6	84	0.37	0.6	325	36,363.60
	welders	3	8	46	0.45	0.6	325	32,292.00
Paving	Cement and Mortar Mixers	1	6	10	0.56	0.6	23	463.68
	Pavers	1	6	81	0.42	0.6	23	2,816.86
	Paving Equipment	1	8	89	0.36	0.6	23	3,537.22
	Rollers	1	7	36	0.38	0.6	23	1,321.49
	Tractors/Loaders/Backhoes	1	8	84	0.37	0.6	23	3,431.23
Architectural Coating	Air Compressors	1	6	37	0.48	0.6	64	4,091.90
Trenching	Trencher	2	7	40	0.5	0.6	63	5,292.00
	Tractors/Loaders/Backhoes	2	9	84	0.37	0.6	63	105,734.16
								<b>Total</b> <b>448,392.95</b>

**OFF-ROAD CONSTRUCTION DIESEL**

**Fuel Usage** **22,419.65**  
**TOTAL CONSTRUCTION DIESEL** **72,888.08**  
**TOTAL GAS/GALLONS** **125,455.40**  
**TOTAL DIESEL/GALLONS** **102,308.34**

HP = horsepower. Gallons of diesel fuel per HP-hour - 0.05.

Equipment assumptions are provided in the CalEEMod output files for the Project and fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.

**Water Usage for fugitive dust control during construction**

Water application rate = 3,020 gallons/acre/day  
 Each gallon of delivered potable water in Southern California is associated with 0.009727 kWhr of electricity).

Grading 44 days x 1.23 acres x 3,020 gallons = 163,442 gallons x 0.009727 = 1,589 kWhr

54.12  
 163442.4  
 1589.804225