

Existing Annual VMT:

153,234

Fuel

Fleet Mix	auto	91%	139,443	gas (mpg)	22.5	6,197.46
	other	9%	13,791	diesel (mpg)	5.71	2,415.25
						8,612.71

Project Annual VMT:

7,336,026

Fleet Mix	auto	91%	6,675,784	gas (mpg)	22.5	296,701.50
	other	9%	660,242	diesel (mpg)	5.71	115,629.13
						412,330.63

Net Project Annual VMT: 7,182,792

Fleet Mix	auto	91%	6,536,341	gas (mpg)	22.5	290,504.03
	other	9%	646,451	diesel (mpg)	5.71	113,213.88
						403,717.92

Worker Fuel (Gasoline, on-road)

phase	trips	length (miles)	days	total Miles	MPG	Gallons
demolition	50	14.7	7	5,145	22.5	228.67
Site Preparation	50	14.7	15	11,025	22.5	490.00
Grading	200	14.7	32	94,080	22.5	4,181.33
Building Construction	500	14.7	578	4,248,300	22.5	188,813.33
Architectural Coating	200	14.7	306	899,640	22.5	39,984.00
						233,697.33

Vender Fuel (Diesel, on-road)

phase	trips	length (miles)	days	total Miles	MPG	Gallons
demolition	0	6.9	7	0	5.71	0.00
Site Preparation	10	6.9	15	1,035	5.71	181.26
Grading	20	6.9	32	4,416	5.71	773.38
Building Construction	50	6.9	578	199,410	5.71	34,922.94
Architectural Coating	50	6.9	306	105,570	5.71	18,488.62
						54,366.20

Haul Fuel (Diesel, on-road)

phase	trips	length (miles)	days	total Miles	MPG	Gallons
demolition	100	50	7	35,000	5.71	6,129.60
Site Preparation	0	50	15	0	5.71	0.00
Grading	4800	50	32	7,680,000	5.71	1,345,008.76
Building Construction	0	50	578	0	5.71	0.00
Architectural Coating	0	50	306	0	5.71	0.00
						1,351,138.35

Total On-Road Gas 233,697.33

Total On-Road Diesel 1,405,504.55

Construction Equipment (Diesel, off-road)

Phase	Equipment	Units	Hours	HP	Load Factor	Ave. Daily Load Factor	Days	HP Hours
Demolition	Concrete/Industrial Saw	1	8	81	0.38	0.6	7	1,034.21
	Dumpers/Tenders	10	8	81	0.73	0.6	7	1,986.77
	Off-Highway Tractors	1	8	247	0.4	0.6	7	3,319.68
	Rubber Tired Dozers	1	8	247	0.4	0.6	7	3,319.68
	Signal Board	2	8	97	0.37	0.6	7	1,205.90
	Sweepers/Scrubbers	1	8	64	0.46	0.6	7	989.18
	Tractors/Loaders/Backhoes	3	8	97	0.37	0.6	7	1,205.90
Site Preparation	Bore/Drill Rigs	2	8	221	0.5	0.6	15	7,956.00
	Excavators	1	7	247	0.4	0.6	15	6,224.40
	Graders	1	8	187	0.41	0.6	15	5,520.24

	Off-Highway Tractors	1	8	124	0.41	0.6	15	3,660.48
	Rubber Tired Dozers	1	7	247	0.4	0.6	15	6,224.40
	Signal Board	2	8	6	0.82	0.6	15	354.24
	Sweepers/Scrubbers	1	8	64	0.46	0.6	15	2,119.68
	Tractors/Loaders/Backhoes	1	8	97	0.37	0.6	15	2,584.08
	Trenchers	2	8	78	0.5	0.6	15	2,808.00
Grading	Dumpers/Tenders	19	6	247	0.4	0.6	32	11,381.76
	Graders	2	6	187	0.41	0.6	32	8,832.38
	Off-Highway Tractors	1	7	97	0.37	0.6	32	4,823.62
	Rubber Tired Dozers	1	6	347	0.4	0.6	32	15,989.76
	Signal Board	2	8	6	0.82	0.6	32	755.71
	Sweepers/Scrubbers	1	8	64	0.46	0.6	32	4,521.98
	Tractors/Loaders/Backhoes	1	7	97	0.37	0.6	32	482,361.60
Building Construction	Aerial Lifts	3	6	63	0.31	0.6	578	40,638.02
	Air Compressors	10	6	78	0.48	0.6	578	77,905.15
	Cement and Mortar Mixers	4	6	9	0.56	0.6	578	10,487.23
	Concrete/Industrial Saw	5	8	81	0.73	0.6	578	164,050.27
	Cranes	1	6	231	0.29	0.6	578	139,392.79
	Forklifts	3	6	89	0.2	0.6	578	37,038.24
	Generator Sets	1	8	84	0.74	0.6	578	172,456.70
	Pressure Washer	5	8	84	0.74	0.6	578	172,456.70
	Signal Board	2	6	97	0.37	0.6	578	74,679.91
	Sweepers/Scrubbers	1	8	64	0.46	0.6	578	81,678.34
	Tractors/Loaders/Backhoes	1	6	97	0.37	0.6	578	74,679.91
	Trenchers	2	8	78	0.5	0.6	578	108,201.60
	Welders	5	8	46	0.45	0.6	578	57,430.08
Architectural Coating	Aerial Lifts	3	6	36	0.31	0.6	306	12,293.86
	Air Compressors	10	6	78	0.48	0.6	306	41,243.90
	Cement and Mortar Mixers	4	6	9	0.56	0.6	306	5,552.06
	Concrete/Industrial Saw	5	8	81	0.73	0.6	306	86,850.14
	Cranes	1	6	9	0.56	0.6	306	5,552.06
	Forklifts	3	8	89	0.2	0.6	306	26,144.64
	Pressure Washer	5	6	13	0.3	0.6	306	4,296.24
	Signal Board	2	8	6	0.82	0.6	306	7,226.50
	Sweepers/Scrubbers	1	8	64	0.46	0.6	306	43,241.47
	Welders	5	6	46	0.45	0.6	306	22,803.12

Total **2,045,478.62**

1,507,778.48

1,741,475.82

Fuel Usage **102,273.93**

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).

$$\text{Grading } 32 \text{ days} \times .75 \text{ acres} \times 3,020 \text{ gallons} = 72,480 \text{ gallons} \times 0.009727 = 705 \text{ kWhr}$$