

Table 1 – Total Construction-Related Fuel Consumption

Sycamore Canyon Business Park

Fuel	Consumption	
Diesel		
On-Road Construction Trips ¹	533	Gallons
Off-Road Construction Equipment ²	48,032	Gallons
Diesel Total	48,565	Gallons
Gasoline		
On-Road Construction Trips ¹	1,107	Gallons
Off-Road Construction Equipment ³	-	Gallons
Gasoline Total	1,107	Gallons

Notes:

1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod for all years of construction and fleet-average fuel consumption in gallons per mile from EMFAC2014 web based data for each of the construction years in the SCAQMD. See Table 2 for calculation details.
2. Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (HP)-hour, based on SCAQMD CEQA Air Quality Handbook, Table A9-3E.
3. All emissions from off-road construction equipment were assumed to be diesel.

Table 2 – On-Road Construction Trip Estimates**Sycamore Canyon Business Park**

Trip Type	Trips	Trip length	Vehicle Miles Traveled (VMT)	Fuel Efficiency	Annual Fuel Usage ¹	
	(trips)	(miles)	(miles)	(mpg)	(Fuel)	(gallon)
Worker ^{2,3}	1,842	14.7	27,077	23.9	Gasoline	1,107
Vendor ⁴	574	6.9	3,961	7.7	Diesel	533

Notes:

1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod output (DEIR Appendix B) for all years of construction and fleet-average fuel consumption in gallons per mile from EMFAC2014 web based data for each of the construction years in the South Coast Air Quality Management District (SCAQMD).
2. Worker trips were assumed to be 100% gasoline powered vehicles.
3. Per CalEEMod, worker Trips were assumed to be 50% LDA, 25% LDT1, and 25% LDT2.
4. Vendor trips were assumed to be 50% MHDT and 50% HHDT, split evenly between the MHDT and HHDT construction categories.

Table 3 – Annual Energy Consumption from Operation

Sycamore Canyon Business Park

Fuel Type	Energy Consumption	Units
Electricity		
Building ¹	4,359,450	kWh/year
Water ²	361,749	kWh/year
Total Electricity	4,721,199	kWh/year
Mobile^{3,4}		
Gasoline	355,394,340	gallons/year
Diesel	3,325,249,685	gallons/year

Notes:

1. Building electricity use from CalEEMod output (DEIR Appendix B).
2. Calculated based on the CalEEMod SCAQMD energy intensity of 0.0111 kWhr per gallon for supply, distribution, and treatment of water and the Project's annual water consumption based on the Water Supply Assessment (Appendix K).
3. Mobile source fuel use based on annual vehicle miles traveled (VMT) from CalEEMod output for operational year 2018 and fleet-average fuel consumption in gallons per mile from EMFAC2014 web based data in the South Coast Air Quality Management District.
4. Operational VMT for the Project was calculated at 34,580,335,830 miles per year based on the trip generation rate as calculated in the CalEEMod output and the project-specific Traffic Impact Analysis (DEIR Appendix J).