APPENDIX D

Appendix D – Energy Consumption Analysis

Proposed Project Total Construction-Related and Operational Gasoline Usage

Action	Carbon Dioxide Equivalents (CO_2e) in Metric Tons[1]	Conversion of Metric Tons to Kilograms[2]	Construction Equipment Emission Factor[2]	Total Gallons of Fuel Consumed
Project Construction	**11320**	**11320000**	**10.15**	**1,115,271**
		Per Climate Registry Equation 13e	Per Climate Registry Equation 13e	
	Per CalEEMod Output Files.			

Total Gallons Consumed During Project Construction: 1,115,271

Notes:
Fuel used by all construction equipment, including vehicle hauling trucks, assumed to be diesel.

Sources:
[1]ECORP Consulting, 2020.

[2]Climate Registry. 2016. *General Reporting Protocol for the Voluntary Reporting Program version 2.1.* January 2016.
http://www.theclimateregistry.org/wp-content/uploads/2014/11/General-Reporting-Protocol-Version-2.1.pdf

Total Gallons During Project Operations [3]

Area	Sub-Area	Cal. Year	Season	Veh_tech	EMFAC 2011 Category	Fuel_GAS	Daily Total	ANNUAL TOTAL
Sub-Areas	San Bernardino	2024	Annual	All Vehicles	All Vehicles [4]	0.708699	708.699	**258,675.1**

Sources:
[3]Californai Air Resource Board. 2017. EMFAC2017 Mobile Emissions Model.

Notes:
[4]Excluding Heavy-Duty Highway Trucks, T6 Agricultural Truck, T6 Instate Construction (heavy and small), T7 Agricultural Truck, T7 CAIRP Construction, T7 Single Construction, T7 Tractor Truck, and T7 Tractor Construction