

APPENDIX G:
ENERGY CONSUMPTION WORKSHEETS

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South Park Towers Project Construction Fuel Calculations

PHASE	Lbs/day	Construction	Emission	Diesel Fuel
Project Construction (On-Site)	Total CO2 [a]	(# of Days)	Factor [b] (22.45 lbs/gal.)	(Gallons)
Demolition 2023	6,578	26	22.45	7,618.17
Grading 2023	18,470	26	22.45	21,390.65
Building Foundations 2023	7,366	53	22.45	17,389.67
Building Construction 2023-2024	4,597	313	22.45	64,091.80
Architectural Coating 2024-2025	992	313	22.45	13,830.56
Paving 2025	1,793	106	22.45	8,465.84
Subtotal	39,796			132,786.68 Diesel

Notes

- [a] See Appendix A, AQ and GHG Worksheets, (On-site construction emissions for heavy duty diesel equipment, vendor, and hauling).
- [b] CO emissions to fuel consumption conversion factor derived from U.S. Energy Information Administration [https://www.eia.gov/environment/emissions/co2_vol_mass.php]

PHASE	Lbs/day	Construction	Emission	Gasoline Fuel
Project Construction (Off-Site)	Total CO2 [c]	(# of Days)	Factor [d] (19.37 lbs/gal.)	(Gallons)
Demolition 2023	180	26	19.37	241.61
Grading 2023	180	26	19.37	241.61
Building Foundations 2023	4,757	53	19.37	13,016.06
Building Construction 2023-2024	4,757	313	19.37	76,868.40
Architectural Coating 2024-2025	173	313	19.37	2,795.51
Paving 2025	1,861	106	19.37	10,184.10
Subtotal	11,908			103,347.29 Gasoline
TOTAL	51,704			236,133.97 Gas and Diesel

Notes

- [c] See Appendix A, AQ and GHG Worksheets, (Off-site construction emissions for vendor and worker trips).
- [d] CO emissions to fuel consumption conversion factor derived from U.S. Energy Information Administration [https://www.eia.gov/environment/emissions/co2_vol_mass.php]

Source: Parker Environmental Consultants, 2023.



**South Park Towers Project
Operational Fuel Calculations**

	Annual Vehicle Miles Traveled	Annual Metric Tons CO2e [c]	Conversion (1 MT = 2204.62 lbs.)	Annual lbs CO2e	Emission Factor [d] (19.37 lbs/gal.)	Gasoline Fuel (Gallons)
Mobile Source	7,319,886	4,039.00	2,204.60	8,904,379.40	19.37	459,699.50
Subtotal		4,039.00		8,904,379.40		459,699.50

Source: Parker Environmental Consultants, 2023



**South Park Towers Project - Existing Conditions
Operational Fuel Calculations**

	Annual Vehicle Miles Traveled	Annual Metric Tons CO2e [c]	Conversion (1 MT = 2204.62 lbs.)	Annual lbs CO2e	Emission Factor [d] (19.37 lbs/gal.)	Gasoline Fuel (Gallons)
Mobile Source	1,885,200	764.00	2,204.60	1,684,314.40	19.37	86,954.80
Subtotal		764.00		1,684,314.40		86,954.80

Source: Parker Environmental Consultants, 2023