

Appendix G Fuel Usage

Equipment	Equipment Type	Estimated Horsepower	Probable Fuel Type	Equipment Quantity	Estimated Days per Week of Operation	Estimated Duration of Use (hours)	Estimated Duration of Use (weeks)	Total Hours	Estimated Month Start	Estimated Month End	Load Factor	CO2 Intensity Factor (lb/MWhr)	Fuel Consumption Rate (bhp-hr/gal)	Fuel Usage (gallons)
Substation Civil Construction– Yard Expansion/Fencing (6 months)														
Crew Cab Truck	Worker vehicle	247	Gas	3	5	3	26	1,170	January	June	0.40	203.98	18.5	1,513.20
Forklift	Construction equipment	97	Diesel	2	5	3	26	780	January	June	0.37	203.98	18.5	8,587.59
Concrete Truck	Heavy haul truck	402	Diesel	2	5	8	13	1,040	April	June	0.38	203.98	18.5	2,777.08
D-3 Bulldozer	Construction equipment	247	Diesel	1	5	8	13	520	January	March	0.40	203.98	18.5	2,155.05
Gradall	Construction equipment	187	Diesel	1	5	4	26	520	January	June	0.41	203.98	18.5	10,734.49
Water Truck	Heavy haul truck	402	Diesel	2	5	5	26	1,300	January	June	0.38	203.98	18.5	297.51
Compactor	Construction equipment	8	Diesel	2	5	8	20	1,600	January	April	0.43	203.98	18.5	1,346.91
Road Grader, Six Wheel	Construction equipment	187	Diesel	1	5	5	13	325	February	April	0.41	203.98	18.5	4,999.14
Elevating Scraper	Construction equipment	367	Diesel	1	5	5	21	525	January	May	0.48	203.98	18.5	60.43
Large Compactor Roller	Construction equipment	8	Diesel	1	5	5	13	325	February	May	0.43	203.98	18.5	8,587.59
2-ton Flatbed Truck	Heavy haul truck	402	Diesel	2	5	4	26	1,040	January	June	0.38	203.98	18.5	2,030.53
Backhoe	Construction equipment	172	Diesel	1	5	8	13	520	January	June	0.42	203.98	18.5	5,241.60
Portable Generator	Construction equipment	84	Diesel	2	5	6	26	1,560	January	June	0.74	203.98	18.5	3,105.95
Large Excavator Drill	Construction equipment	221	Diesel	1	5	8	13	520	January	May	0.50	203.98	18.5	632.04
Loader	Construction equipment	203	Diesel	2	5	2	8	160	February	June	0.36	203.98	18.5	
Mobile Trailers	N/A	N/A	Electric	4	5	10	26	5,200	January	June	N/A	N/A	N/A	N/A
TSP Delivery (7 months)														
40-ton Crane	Construction equipment	231	Diesel	1	2	8	1	16	April	October	0.29	203.98	18.5	57.94
Tractor Trailer	Construction equipment	172	Diesel	2	2	8	1	32	April	October	0.42	203.98	18.5	124.96
Material Delivery (7 months)														
Crane with 120' Boom	Construction equipment	231	Diesel	3	2	8	1	48	April	October	0.29	203.98	18.5	173.81
Fork Lift	Construction equipment	89	Diesel	1	2	8	1	16	April	October	0.20	203.98	18.5	15.39
Conductor Installation (includes old conductor removal) (7 months)														
40-ton Crane	Construction equipment	231	Diesel	1	5	8	4	160	April	October	0.29	203.98	18.5	579.37
Bucket Truck	Construction equipment	158	Diesel	2	5	8	4	320	April	October	0.38	203.98	18.5	1,038.53
Boom Truck	Construction equipment	158	Diesel	2	5	8	4	320	April	October	0.38	203.98	18.5	1,038.53
Crew-cab Truck	Worker vehicle	158	Gas	2	5	8	4	320	April	October	0.38	203.98	18.5	1,038.53
Foreman Pickup Truck	Worker vehicle	158	Gas	2	5	8	4	320	April	October	0.38	203.98	18.5	1,038.53
Forklift	Construction equipment	247	Diesel	1	5	8	4	160	April	October	0.40	203.98	18.5	854.49
TSP Foundations (7 months)														
Tensioner Attached to Line Truck	N/A	N/A	N/A	1	5	8	4	160	April	October	N/A	N/A	N/A	N/A
Construction Digger	Construction equipment	402	Diesel	1	5	8	3	120	April	October	0.42	203.98	18.5	1,095.18
Backhoe	Construction equipment	97	Diesel	1	5	8	3	120	April	October	0.37	203.98	18.5	232.80

Equipment	Equipment Type	Estimated Horsepower	Probable Fuel Type	Equipment Quantity	Estimated Days per Week of Operation	Estimated Duration of Use (hours)	Estimated Duration of Use (weeks)	Total Hours	Estimated Month Start	Estimated Month End	Load Factor	CO2 Intensity Factor (lb/MWhr)	Fuel Consumption Rate (bhp-hr/gal)	Fuel Usage (gallons)
Dump Truck	Heavy haul truck	402	Diesel	1	5	8	3	120	April	October	0.38	203.98	18.5	990.88
Foreman Pickup Truck	Worker vehicle	402	Gas	1	5	8	3	120	April	October	0.38	203.98	18.5	990.88
Crew-cab Truck	Worker vehicle	402	Gas	1	5	8	3	120	April	October	0.38	203.98	18.5	990.88
Concrete Truck	Heavy haul truck	402	Diesel	1	5	8	3	120	April	October	0.38	203.98	18.5	990.88
Concrete Pump	Construction equipment	172	Diesel	1	5	8	3	120	April	October	0.42	203.98	18.5	468.58
Hardline Puller	N/A	N/A	N/A	2	5	8	4	320	April	October	N/A	N/A	N/A	N/A
TSP Installation (Substation)														
40-ton Crane	Construction equipment	402	Diesel	1	5	8	4	160	April	October	0.29	203.98	18.5	1,008.26
Bucket Truck	Construction equipment	402	Diesel	2	5	8	4	320	April	October	0.38	203.98	18.5	2,642.34
Foreman Pickup Truck	Worker vehicle	402	Gas	2	5	8	4	320	April	October	0.38	203.98	18.5	2,642.34
Crew-cab Truck	Worker vehicle	402	Gas	2	5	8	4	320	April	October	0.38	203.98	18.5	2,642.34
Substation Construction – Replace Electric Equipment and Install Stormwater Pond (15 Months)														
Crew Cab Truck	Worker vehicle	402	Gas	3	5	3	65	2,925	July	May	0.38	203.98	18.5	24,152.59
Forklift	Construction equipment	63	Diesel	2	5	3	50	1,500	July	May	0.31	203.98	18.5	1,583.51
Concrete Truck	Heavy haul truck	402	Diesel	2	5	8	13	1,040	July	May	0.38	203.98	18.5	8,587.59
D-3 Bulldozer	Construction equipment	247	Diesel	1	5	8	20	800	July	May	0.40	203.98	18.5	4,272.43
Gradall	Construction equipment	89	Diesel	1	5	4	65	1,300	July	September	0.20	203.98	18.5	1,250.81
Water Truck	Heavy haul truck	402	Diesel	2	5	5	55	2,750	July	June	0.38	203.98	18.5	22,707.57
Compactor	Construction equipment	8	Diesel	2	5	8	50	4,000	July	May	0.43	203.98	18.5	743.78
Road Grader, Six Wheel	Construction equipment	187	Diesel	1	5	5	25	625	July	May	0.20	203.98	18.5	1,263.51
Elevating Scraper	Construction equipment	367	Diesel	1	5	5	25	625	July	May	0.48	203.98	18.5	5,951.35
Large Compactor Roller	Construction equipment	8	Diesel	1	5	5	50	1,250	July	May	0.43	203.98	18.5	232.43
2-ton Flatbed Truck	Heavy haul truck	402	Diesel	2	5	4	65	2,600	July	May	0.38	203.98	18.5	21,468.97
Backhole	Construction equipment	97	Diesel	1	5	8	13	520	July	May	0.37	203.98	18.5	1,008.80
Portable Generator	Construction equipment	84	Diesel	2	5	6	55	3,300	July	May	0.38	203.98	18.5	5,693.84
Large Excavator Drill	Construction equipment	221	Diesel	1	5	8	13	520	July	May	0.38	203.98	18.5	2,360.52
Loader	Construction equipment	65	Diesel	2	5	2	55	1,100	July	June	0.37	203.98	18.5	1,430.00
Mobile Trailers	N/A	N/A	Electric	4	5	10	65	13,000	January	September	N/A	N/A	N/A	N/A
Aerial Manlifts (60 feet)	Construction equipment	63	Diesel	2	5	5	60	3,000	July	August	0.31	203.98	18.5	3,167.03
30-ton Crane	Construction equipment	231	Diesel	1	5	5	60	1,500	July	August	0.29	203.98	18.5	5,431.62
Small Compactors	Construction equipment	8	Diesel	2	5	5	60	3,000	July	August	0.43	203.98	18.5	557.84
Mini Excavators	Construction equipment	158	Diesel	2	5	5	60	3,000	July	August	0.38	203.98	18.5	9,736.22
Substation Civil - Final Grading (3 Months)														
Crew Cab Truck	Worker vehicle	402	Gas	3	5	3	13	585	October	December	0.38	203.98	18.5	4,830.52
D-3 Bulldozer	Construction equipment	247	Diesel	1	5	8	4	160	October	December	0.40	203.98	18.5	854.49
Water Truck	Heavy haul truck	402	Diesel	2	5	5	10	500	October	December	0.38	203.98	18.5	4,128.65
Compactor	Construction equipment	8	Diesel	2	5	8	8	640	October	December	0.43	203.98	18.5	119.01

Equipment	Equipment Type	Estimated Horsepower	Probable Fuel Type	Equipment Quantity	Estimated Days per Week of Operation	Estimated Duration of Use (hours)	Estimated Duration of Use (weeks)	Total Hours	Estimated Month Start	Estimated Month End	Load Factor	CO2 Intensity Factor (lb/MWhr)	Fuel Consumption Rate (bhp-hr/gal)	Fuel Usage (gallons)
Road Grader, Six Wheel	Construction equipment	187	Diesel	1	5	5	4	100	October	December	0.20	203.98	18.5	202.16
Elevating Scraper	Construction equipment	367	Diesel	1	5	5	6	150	October	December	0.48	203.98	18.5	1,428.32
Large Compactor Roller	Construction equipment	8	Diesel	1	5	5	4	100	October	December	0.43	203.98	18.5	18.59
2-ton Flatbed Truck	Heavy haul truck	402	Diesel	2	5	4	13	520	October	December	0.38	203.98	18.5	4,293.79
Backhole	Construction equipment	97	Diesel	1	5	8	4	160	October	December	0.37	203.98	18.5	310.40
Loader	Construction equipment	97	Diesel	2	5	2	4	80	October	December	0.37	203.98	18.5	155.20
Mobile Trailers	N/A	N/A	Electric	4	5	10	13	2,600	October	December	N/A	N/A	N/A	N/A