

ATTACHMENT 5.6-A: CONSTRUCTION FUEL CONSUMPTION

Table 1: Fuel Consumption Calcs

EquipIndex	Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Quantity	Hours Per Day	Working Days	Load Factor	On Distance	VMT	On Efficiency	On Fuel Use	Off BSFC	Off Use	Helo Efficiency	Helo Use	Fuel Category
1	L-01	Survey	Pickup - 1/2 Ton	395	Gasoline	2	4	26		40	160	27.3	152.4					Construction Vehicles
2	L-02	Site Development/Staging Yards	Truck - Water 4 K	300	Diesel	4	10	76		40	320	8.5	2849.0					Construction Vehicles
3	L-02	Site Development/Staging Yards	Loader - 4-5 Yd	230	Diesel	2	10	76	0.36					0.4	6497.3			Construction Equipment
4	L-02	Site Development/Staging Yards	Truck - Dump 10-12 Yd	415	Diesel	5	10	76		40	400	6.0	5046.7					Construction Vehicles
5	L-02	Site Development/Staging Yards	Motor Grader	250	Diesel	2	10	76	0.41					0.4	8043.1			Construction Equipment
6	L-02	Site Development/Staging Yards	Scraper	410	Diesel	4	10	76	0.48					0.4	30885.6			Construction Equipment
7	L-02	Site Development/Staging Yards	Vibratory Roller	157	Diesel	2	10	76	0.38					0.4	4681.5			Construction Equipment
8	L-02	Site Development/Staging Yards	Pickup - 1/2 Ton	395	Gasoline	4	4	76		40	320	27.3	890.9					Construction Vehicles
9	L-02	Site Development/Staging Yards	Generator - 25 Kw	36	Diesel	2	10	76	0.74					0.4	2324.0			Construction Equipment
10	L-02	Site Development/Staging Yards	Forklift - 15,000 lb	130	Diesel	4	6	76	0.2					0.4	2448.2			Construction Equipment
11	L-02	Site Development/Staging Yards	Pickup - 1 Ton	410	Diesel	4	4	76		40	320	31.4	774.6					Construction Vehicles
12	L-02	Site Development/Staging Yards	844 Loader	417	Diesel	1	6	76	0.36					0.4	3534.0			Construction Equipment
13	L-02	Site Development/Staging Yards	Semi Truck	500	Diesel	2	6	76		40	160	6.0	2018.7					Construction Vehicles
14	L-03	Below-Grade Construction	Truck - Water 4 K	300	Diesel	2	10	152		40	160	8.5	2849.0					Construction Vehicles
15	L-03	Below-Grade Construction	Excavator	108	Diesel	2	10	152	0.38					0.4	6440.8			Construction Equipment
16	L-03	Below-Grade Construction	Forklift - 15 K Reach	130	Diesel	3	8	152	0.2					0.4	4896.5			Construction Equipment
17	L-03	Below-Grade Construction	Backhoe - 2X4	68	Diesel	2	6	152	0.38					0.4	2705.0			Construction Equipment
18	L-03	Below-Grade Construction	Pickup - 1/2 Ton	395	Gasoline	4	2	152		40	320	27.3	1781.8					Construction Vehicles
19	L-03	Below-Grade Construction	Pickup - 1 Ton	410	Diesel	4	2	152		40	320	31.4	1549.2					Construction Vehicles
20	L-03	Below-Grade Construction	Excavator - Mini	70	Diesel	1	5	152	0.38					0.4	1160.2			Construction Equipment
21	L-03	Below-Grade Construction	Generator - 25 Kw	36	Diesel	1	10	152	0.74					0.4	2324.0			Construction Equipment
22	L-03	Below-Grade Construction	Truck - Concrete	425	Diesel	4	5	152		60	480	6.0	12112.1					Construction Vehicles
23	L-03	Below-Grade Construction	Loader - 4-5 Yd	230	Diesel	2	10	152	0.36					0.4	12994.6			Construction Equipment
24	L-03	Below-Grade Construction	Pressure Digger - Lo-Drill (Trac	275	Diesel	1	8	152	0.5					0.4	8631.7			Construction Equipment
25	L-03	Below-Grade Construction	Excavator	275	Diesel	1	10	152	0.38					0.4	8200.1			Construction Equipment
26	L-03	Below-Grade Construction	Truck - Dump 10-12 Yd	415	Diesel	3	5	152		40	240	6.0	6056.1					Construction Vehicles
27	L-03	Below-Grade Construction	Tool - Van/Conex 20'	0	NA	6	10	152										Construction Vehicles
28	L-03	Below-Grade Construction	Trencher	75	Diesel	2	5	152	0.5					0.4	3271.3			Construction Equipment
29	L-03	Below-Grade Construction	Skid steer loader	74	Diesel	2	10	152	0.37					0.4	4777.0			Construction Equipment
30	L-03	Below-Grade Construction	Wire Trailer/ Tensioner	175	Diesel	1	5	152	0.42					0.4	2883.8			Construction Equipment
31	L-03	Below-Grade Construction	Wire Puller	175	Diesel	1	5	152	0.42					0.4	2883.8			Construction Equipment
32	L-04	Above-Grade Construction	Wire Trailer/ Tensioner	175	Diesel	1	5	333	0.42					0.4	6317.7			Construction Equipment
33	L-04	Above-Grade Construction	Wire Puller	175	Diesel	1	5	333	0.42					0.4	6317.7			Construction Equipment
34	L-04	Above-Grade Construction	Crane - 200 Ton	275	Diesel	1	4	333	0.29					0.4	5483.9			Construction Equipment
35	L-04	Above-Grade Construction	Pickup - 1/2 Ton	395	Gasoline	4	2	333		40	320	27.3	3903.5					Construction Vehicles
36	L-04	Above-Grade Construction	Pickup - 1 Ton	410	Diesel	4	2	333		40	320	31.4	3393.9					Construction Vehicles
37	L-04	Above-Grade Construction	Welding Truck	395	Diesel	2	2	333		40	160	8.5	6241.5					Construction Vehicles
38	L-04	Above-Grade Construction	Generator - 25 Kw	36	Diesel	2	10	333	0.74					0.4	10182.6			Construction Equipment
39	L-04	Above-Grade Construction	Crane - 35 Ton (Manlift)	250	Diesel	2	5	333	0.29					0.4	12463.5			Construction Equipment
40	L-04	Above-Grade Construction	Forklift - 10 K Reach	130	Diesel	2	4	333	0.2					0.4	3575.7			Construction Equipment
41	L-04	Above-Grade Construction	Forklift -15,000 lb	130	Diesel	1	4	333	0.2					0.4	1787.9			Construction Equipment
42	L-04	Above-Grade Construction	Loader - 4-5 Yd	74	Diesel	2	5	333	0.36					0.4	5091.3			Construction Equipment
43	L-04	Above-Grade Construction	120' Manlift	74	Diesel	2	4	333	0.31					0.4	3507.4			Construction Equipment
44	P-05	Foundation Installation	Pressure Digger - Lo-Drill (Trac	275	Diesel	1	8	40	0.5					0.4	2271.5			Construction Equipment
45	P-05	Foundation Installation	Truck - Concrete	425	Diesel	4	5	40		60	480	6.0	3187.4					Construction Vehicles
46	P-05	Foundation Installation	Pickup - 1 Ton	410	Diesel	4	2	40		60	480	31.4	611.5					Construction Vehicles
47	P-05	Foundation Installation	Truck - Water 4 K	300	Diesel	2	6	40		60	240	8.5	1124.6					Construction Vehicles
48	P-05	Foundation Installation	Truck - Dump 10-12 Yd	415	Diesel	2	10	40		40	160	6.0	1062.5					Construction Vehicles
49	P-05	Foundation Installation	Skid steer loader	74	Diesel	1	10	40	0.37					0.4	628.6			Construction Equipment
50	P-05	Foundation Installation	Forklift - 10 K Reach	130	Diesel	2	8	40	0.2					0.4	859.0			Construction Equipment
51	P-05	Foundation Installation	Crane - 35 Ton (Manlift)	250	Diesel	1	4	40	0.29					0.4	598.8			Construction Equipment
52	P-05	Foundation Installation	Loader - 4-5 Yd	230	Diesel	1	8	40	0.36					0.4	1367.8			Construction Equipment
53	P-05	Foundation Installation	Rough Terrain Crane	185	Diesel	1	2	40	0.29					0.4	221.6			Construction Equipment
54	P-05	Foundation Installation	Motor Grader	250	Diesel	1	10	40	0.41					0.4	2116.6			Construction Equipment
55	P-05	Foundation Installation	D6 Type Dozer	250	Diesel	1	10	40	0.4					0.4	2065.0			Construction Equipment
56	P-05	Foundation Installation	Excavator	250	Diesel	1	10	40	0.38					0.4	1961.7			Construction Equipment
57	P-05	Foundation Installation	Vibratory Roller	125	Diesel	1	10	40	0.38					0.4	980.9			Construction Equipment
58	P-06	Structure Installation	Crane - 35 Ton (Manlift)	250	Diesel	2	10	21	0.29					0.4	1572.0			Construction Equipment
59	P-06	Structure Installation	Helicopter - Heavy Duty	3200	Jet	1	5	13							164.2	10674.5		Helicopter and Support
60	P-06	Structure Installation	Pickup - 1/2 ton	395	Gasoline	2	2	21		40	160	27.3	123.1					Construction Vehicles
61	P-06	Structure Installation	Forklift - 15,000 lb	130	Diesel	1	5	21	0.2					0.4	140.9			Construction Equipment
62	P-06	Structure Installation	Pickup - 1 ton	410	Diesel	2	2	21		60	240	31.4	160.5					Construction Vehicles
63	P-06	Structure Installation	Crane - 200 Ton	275	Diesel	1	10	21	0.29					0.4	864.6			Construction Equipment
64	P-06	Structure Installation	844 Loader	417	Diesel	1	8	21	0.36					0.4	1302.0			Construction Equipment
65	P-06	Structure Installation	Truck - Water 4 K	300	Diesel	2	6	21		60	240	8.5	590.4					Construction Vehicles
66	P-06	Structure Installation	Jet Fuel Truck	300	Diesel	1	10	21		40	80	8.5	196.8					Construction Vehicles
67	P-07	Conductor Installation	Helicopter	700	Jet	1	10	12							32.0	3835.8		Helicopter and Support
68	P-07	Conductor Installation	Jet Fuel Truck	300	Diesel	1	10	20		40	80	8.5	187.4					Construction Vehicles
69	P-07	Conductor Installation	Crane - 35 Ton (Manlift)	250	Diesel	6	10	20	0.29					0.4	4491.3			Construction Equipment
70	P-07	Conductor Installation	Pickup - 1/2 ton	395	Gasoline	4	2	20		40	320	27.3	234.4					Construction Vehicles
71	P-07	Conductor Installation	Pickup - 1 Ton	410	Diesel	4	2	20		60	480	31.4	305.8					Construction Vehicles
72	P-07	Conductor Installation	D8 Sag Dozer	200	Diesel	3	10	20	0.4					0.4	2478.0			Construction Equipment
73	P-07	Conductor Installation	Wire Puller	175	Diesel	1	5	20	0.42					0.4	379.4			Construction Equipment
74	P-07	Conductor Installation	Truck - Water 4 K	300	Diesel	2	6	20		60	240	8.5	562.3					Construction Vehicles

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75	P-07	Conductor Installation	Wire Trailer/ Tensioner	175	Diesel	1	5	20	0.42									Construction Equipment
76	L-08	Access Road Construction	Pickup - 1/2 ton	395	Gasoline	2	4	16		40	160	27.3	93.8					Construction Vehicles
77	L-08	Access Road Construction	Pickup - 1 ton	410	Diesel	2	4	16		40	160	31.4	81.5					Construction Vehicles
78	L-08	Access Road Construction	Motor Grader	250	Diesel	1	10	16	0.41						0.4	846.6		Construction Equipment
79	L-08	Access Road Construction	Truck - Dump 10-12 Yd	415	Diesel	2	10	16		40	160	6.0	425.0					Construction Vehicles
80	L-08	Access Road Construction	Skid steer loader	74	Diesel	1	10	16	0.37						0.4	251.4		Construction Equipment
81	L-08	Access Road Construction	Truck - Water 4 K	300	Diesel	2	6	16		40	160	8.5	299.9					Construction Vehicles
82	L-08	Access Road Construction	D6 Type Dozer	250	Diesel	1	10	16	0.4						0.4	826.0		Construction Equipment
83	L-08	Access Road Construction	Excavator	250	Diesel	1	10	16	0.38						0.4	784.7		Construction Equipment
84	L-08	Access Road Construction	Vibratory Roller	125	Diesel	0	10	16	0.38						0.4	0.0		Construction Equipment
85	L-09	Foundation Installation	Pressure Digger - Lo-Drill (Trac	275	Diesel	1	8	22	0.5						0.4	1249.3		Construction Equipment
86	L-09	Foundation Installation	Truck - Concrete	425	Diesel	4	5	22		60	480	6.0	1753.1					Construction Vehicles
87	L-09	Foundation Installation	Pickup - 1 Ton	410	Diesel	4	2	22		40	320	31.4	224.2					Construction Vehicles
88	L-09	Foundation Installation	Truck - Water 4 K	300	Diesel	2	6	22		40	160	8.5	412.4					Construction Vehicles
89	L-09	Foundation Installation	Truck - Dump 10-12 Yd	415	Diesel	2	10	22		40	160	6.0	584.4					Construction Vehicles
90	L-09	Foundation Installation	Skid steer loader	74	Diesel	1	10	22	0.37						0.4	345.7		Construction Equipment
91	L-09	Foundation Installation	Forklift - 10 K Reach	130	Diesel	2	8	22	0.2						0.4	472.5		Construction Equipment
92	L-09	Foundation Installation	Crane - 35 Ton (Manlift)	250	Diesel	1	4	22	0.29						0.4	329.4		Construction Equipment
93	L-09	Foundation Installation	844 Loader	417	Diesel	1	8	22	0.36						0.4	1364.0		Construction Equipment
94	L-09	Foundation Installation	Rough Terrain Crane	185	Diesel	1	2	22	0.29						0.4	121.9		Construction Equipment
95	L-10	Structure Installation	Crane - 35 Ton (Manlift)	250	Diesel	2	10	24	0.29						0.4	1796.5		Construction Equipment
96	L-10	Structure Installation	Pickup - 1/2 ton	395	Gasoline	2	2	24		40	160	27.3	140.7					Construction Vehicles
97	L-10	Structure Installation	Forklift - 15,000 lb	130	Diesel	1	5	24	0.2						0.4	161.1		Construction Equipment
98	L-10	Structure Installation	Pickup - 1 ton	410	Diesel	2	2	24		40	160	31.4	122.3					Construction Vehicles
99	L-10	Structure Installation	Crane - 200 Ton	275	Diesel	1	10	24	0.29						0.4	988.1		Construction Equipment
100	L-10	Structure Installation	844 Loader	417	Diesel	1	8	24	0.36						0.4	1488.0		Construction Equipment
101	L-10	Structure Installation	Truck - Water 4 K	300	Diesel	2	6	24		40	160	8.5	449.8					Construction Vehicles
102	L-11	Conductor Installation	Helicopter	700	Jet	1	10	6								32.0	1917.9	Helicopter and Support
103	L-11	Conductor Installation	Jet Fuel Truck	300	Diesel	1	10	26		60	120	8.5	365.5					Construction Vehicles
104	L-11	Conductor Installation	Crane - 35 Ton (Manlift)	250	Diesel	6	10	26	0.29						0.4	5838.8		Construction Equipment
105	L-11	Conductor Installation	Pickup - 1/2 ton	395	Gasoline	4	2	26		40	320	27.3	304.8					Construction Vehicles
106	L-11	Conductor Installation	Pickup - 1 Ton	410	Diesel	4	2	26		40	320	31.4	265.0					Construction Vehicles
107	L-11	Conductor Installation	D8 Sag Dozer	200	Diesel	3	10	26	0.4						0.4	3221.4		Construction Equipment
108	L-11	Conductor Installation	Wire Puller	175	Diesel	1	5	26	0.42						0.4	493.3		Construction Equipment
109	L-11	Conductor Installation	Truck - Water 4 K	300	Diesel	2	6	26		40	160	8.5	487.3					Construction Vehicles
110	L-11	Conductor Installation	Wire Trailer/ Tensioner	175	Diesel	1	5	26	0.42						0.4	493.3		Construction Equipment
111	L-11	Conductor Installation	Deck Barge	N/A	NA	1	2	26										Construction Vehicles
112	L-11	Conductor Installation	Tug Boat	3300	Diesel	2	6	26										Construction Vehicles
113	L-11	Conductor Installation	Support Vessel	200	Diesel	2	4	26										Construction Vehicles
114	L-11	Conductor Installation	Deck Generator	170	Diesel	1	8	26	0.74						0.4	1350.8		Construction Equipment
115	L-11	Conductor Installation	Anchor Winches	100	Diesel	4	4	26	0.42						0.4	1002.8		Construction Equipment
116	L-12	Transition Structure Foundation Installation	Spud Barge	N/A	Diesel	1	4	150										Construction Vehicles
117	L-12	Transition Structure Foundation Installation	Hydraulic Unit	100	Diesel	1	2	150	0.42						0.4	723.1		Construction Equipment
118	L-12	Transition Structure Foundation Installation	Tug Boat	3300	Diesel	2	6	150										Construction Vehicles
119	L-12	Transition Structure Foundation Installation	Deck Winch	225	Diesel	1	2	150	0.42						0.4	1463.6		Construction Equipment
120	L-12	Transition Structure Foundation Installation	Truck - Concrete	425	Diesel	1	10	150		60	120	6.0	2988.2					Construction Vehicles
121	L-12	Transition Structure Foundation Installation	Concrete Pump	350	Diesel	1	3	150	0.74						0.4	6016.9		Construction Equipment
122	L-12	Transition Structure Foundation Installation	Generator - 725 Kw	985	Diesel	1	8	150	0.74						0.4	45155.1		Construction Equipment
123	L-12	Transition Structure Foundation Installation	Deck Generator - 100kW	130	Diesel	1	8	150	0.74						0.4	5959.6		Construction Equipment
124	L-12	Transition Structure Foundation Installation	Support Vessel	200	Diesel	1	6	150										Construction Vehicles
125	L-12	Transition Structure Foundation Installation	Air Compressor	50	Diesel	1	8	150	0.48						0.4	1652.9		Construction Equipment
126	L-12	Transition Structure Foundation Installation	Vibratory Hammer/Pile Driver	665	Diesel	1	8	150	0.42						0.4	17302.5		Construction Equipment
127	L-12	Transition Structure Foundation Installation	Crane	180	Diesel	1	8	150	0.29						0.4	3233.8		Construction Equipment
128	L-12	Transition Structure Foundation Installation	Engine Welder	25	Diesel	1	4	150	0.45						0.4	387.4		Construction Equipment
129	L-12	Transition Structure Foundation Installation	Support Vessel	200	Diesel	2	4	150										Construction Vehicles
130	L-13	Transition Structure Installation	Spud Barge	N/A	Diesel	1	4	25										Construction Vehicles
131	L-13	Transition Structure Installation	Deck Barge	N/A	NA	1	2	25										Construction Vehicles
132	L-13	Transition Structure Installation	Tug Boat	3300	Diesel	2	6	25										Construction Vehicles
133	L-13	Transition Structure Installation	Barge Mounted Crane	250	Diesel	1	8	25	0.29						0.4	748.6		Construction Equipment
134	L-13	Transition Structure Installation	Support Vessel	200	Diesel	2	4	25										Construction Vehicles
135	L-13	Transition Structure Installation	Deck Generator	170	Diesel	1	8	25	0.74						0.4	1298.9		Construction Equipment
136	L-13	Transition Structure Installation	Air Compressor	50	Diesel	1	8	25	0.48						0.4	275.5		Construction Equipment
137	L-13	Transition Structure Installation	Generator - 725 Kw	985	Diesel	1	8	25	0.74						0.4	7525.8		Construction Equipment
138	L-14	Submarine Cable Installation	Survey Vessel	150	Diesel	2	12	147										Construction Vehicles
139	L-14	Submarine Cable Installation	Tug Boat	1200	Diesel	2	8	147										Construction Vehicles
140	L-14	Submarine Cable Installation	Crew Boat	1200	Diesel	1	12	147										Construction Vehicles
141	L-14	Submarine Cable Installation	Small Boats	250	Gasoline	2	12	147										Construction Vehicles
142	L-14	Submarine Cable Installation	Crane	180	Diesel	1	6	147	0.29						0.4	2376.8		Construction Equipment
143	L-14	Submarine Cable Installation	Anchor Winches	100	Diesel	4	4	147	0.42						0.4	5669.4		Construction Equipment
144	L-14	Submarine Cable Installation	Generators	150	Diesel	1	12	147	0.74						0.4	10108.3		Construction Equipment
145	L-14	Submarine Cable Installation	Misc Deck Equipment	100	Diesel	1	12	147	0.42						0.4	4252.1		Construction Equipment
146	L-14	Submarine Cable Installation	Water Pumps	325	Diesel	2	12	147	0.74						0.4	43802.7		Construction Equipment
147	L-14	Submarine Cable Installation	Pull In Winch	100	Diesel	1	12	147	0.42						0.4	4252.1		Construction Equipment
148	L-14	Submarine Cable Installation	Dive Compressor	50	Diesel	2	12	147	0.48						0.4	4859.5		Construction Equipment
149	L-14	Submarine Cable Installation	Termination Genset	50	Diesel	1	12	147	0.74						0.4	3745.9		Construction Equipment

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150	L-14	Submarine Cable Installation	Assist Barge: Crane	200	Diesel	1	12	147	0.29						0.4	5281.8		Construction Equipment
151	L-15	Southern Transition Approach Construction	Onshore Excavator	600	Diesel	1	12	138	0.38						0.4	19491.8		Construction Equipment
152	L-15	Southern Transition Approach Construction	Onshore End Loader	250	Diesel	1	12	138	0.37						0.4	7907.9		Construction Equipment
153	L-15	Southern Transition Approach Construction	Onshore Crane	180	Diesel	1	12	138	0.29						0.4	4462.6		Construction Equipment
154	L-15	Southern Transition Approach Construction	Crane - 200 ton	275	Diesel	1	6	138	0.29						0.4	3408.9		Construction Equipment
155	L-15	Southern Transition Approach Construction	Onshore Vibratory Hammer	300	Diesel	1	12	138	0.42						0.4	10771.8		Construction Equipment
156	L-15	Southern Transition Approach Construction	Air Compressor	50	Diesel	1	12	138	0.48						0.4	2281.0		Construction Equipment
157	L-15	Southern Transition Approach Construction	Truck - Dump 10-12 Yd	415	Diesel	4	6	138		40	320	6.0	7331.0				Construction Vehicles	
158	L-15	Southern Transition Approach Construction	Onshore Dewatering Equip	50	Diesel	2	12	138	0.42						0.4	3991.7		Construction Equipment
159	L-15	Southern Transition Approach Construction	Onshore Trucks	300	Diesel	4	12	138		60	480	8.5	7759.7				Construction Vehicles	
160	L-16	Substation Getaways	Pickup - 1/2 Ton	395	Gasoline	4	2	70		40	320	27.3	820.5					Construction Vehicles
161	L-16	Substation Getaways	Pickup - 1 Ton	410	Diesel	4	2	70		40	320	31.4	713.4					Construction Vehicles
162	L-16	Substation Getaways	Welding Truck	395	Diesel	2	2	70		40	160	8.5	1312.0					Construction Vehicles
163	L-16	Substation Getaways	Generator - 25 Kw	36	Diesel	2	10	70	0.74						0.4	2140.5		Construction Equipment
164	L-16	Substation Getaways	Crane - 35 Ton (Manlift)	250	Diesel	2	5	70	0.29						0.4	2620.0		Construction Equipment
165	L-16	Substation Getaways	Forklift - 10 K Reach	130	Diesel	2	4	70	0.2						0.4	751.7		Construction Equipment
166	L-16	Substation Getaways	Forklift -15,000 lb	130	Diesel	1	4	70	0.2						0.4	375.8		Construction Equipment
167	L-16	Substation Getaways	Loader - 4-5 Yd	74	Diesel	2	5	70	0.36						0.4	1070.2		Construction Equipment
168	L-16	Substation Getaways	Wire Trailer/ Tensioner	175	Diesel	1	5	70	0.42						0.4	1328.0		Construction Equipment
169	L-16	Substation Getaways	Wire Puller	175	Diesel	1	5	70	0.42						0.4	1328.0		Construction Equipment
170	L-16	Substation Getaways	Skid steer loader	74	Diesel	2	10	70	0.37						0.4	2200.0		Construction Equipment
171	L-16	Substation Getaways	Backhoe - 2X4	68	Diesel	2	6	70	0.38						0.4	1245.7		Construction Equipment
172	P-17	Distribution Extension to Substation	Pickup - 1/2 ton	395	Gasoline	2	2	51		40	160	27.3	298.9					Construction Vehicles
173	P-17	Distribution Extension to Substation	Wire Trailer/ Tensioner	175	Diesel	1	5	51	0.42						0.4	967.6		Construction Equipment
174	P-17	Distribution Extension to Substation	Wire Puller	175	Diesel	1	5	51	0.42						0.4	967.6		Construction Equipment
175	P-17	Distribution Extension to Substation	Crane - 35 Ton (Manlift)	250	Diesel	2	10	51	0.29						0.4	3817.6		Construction Equipment
176	P-17	Distribution Extension to Substation	Pickup - 1 Ton	410	Diesel	2	2	51		60	240	31.4	389.8					Construction Vehicles
177	P-17	Distribution Extension to Substation	Forklift - 15 K Reach	130	Diesel	2	6	51	0.2						0.4	821.5		Construction Equipment
178	P-17	Distribution Extension to Substation	Pressure Digger - Lo-Drill (Trac	275	Diesel	1	8	51	0.5						0.4	2896.1		Construction Equipment
179	P-17	Distribution Extension to Substation	Truck - Dump 10-12 Yd	415	Diesel	2	10	51		40	160	6.0	1354.6					Construction Vehicles
180	P-17	Distribution Extension to Substation	Skid steer loader	74	Diesel	2	10	51	0.37						0.4	1602.8		Construction Equipment
181	P-17	Distribution Extension to Substation	Truck - Concrete	425	Diesel	4	5	51		60	480	6.0	4063.9					Construction Vehicles
182	P-17	Distribution Extension to Substation	Backhoe - 2X4	68	Diesel	1	8	51	0.38						0.4	605.1		Construction Equipment
183	L-18	Fiber Extension to Substation	Crane - 35 Ton (Manlift)	250	Diesel	2	10	103	0.29						0.4	7710.1		Construction Equipment
184	L-18	Fiber Extension to Substation	Forklift - 10 K Reach	130	Diesel	1	5	103	0.2						0.4	691.3		Construction Equipment
185	L-18	Fiber Extension to Substation	Excavator - Mini	70	Diesel	2	5	103	0.38						0.4	1572.4		Construction Equipment
186	L-18	Fiber Extension to Substation	Truck - Dump 10-12 Yd	415	Diesel	3	5	103		40	240	6.0	4103.8					Construction Vehicles
187	L-18	Fiber Extension to Substation	Skid steer loader	74	Diesel	2	10	103	0.37						0.4	3237.1		Construction Equipment
188	L-18	Fiber Extension to Substation	Trencher	75	Diesel	1	10	103	0.5						0.4	2216.8		Construction Equipment
189	L-18	Fiber Extension to Substation	Pickup - 1 Ton	410	Diesel	3	2	103		40	240	31.4	787.3					Construction Vehicles
190	L-18	Fiber Extension to Substation	Truck - Concrete	425	Diesel	2	5	103		60	240	6.0	4103.8					Construction Vehicles
191	L-18	Fiber Extension to Substation	Wire Trailer/ Tensioner	175	Diesel	1	5	103	0.42						0.4	1954.1		Construction Equipment
192	L-18	Fiber Extension to Substation	Wire Puller	175	Diesel	1	5	103	0.42						0.4	1954.1		Construction Equipment
193	L-18	Fiber Extension to Substation	Truck - Water 4 K	300	Diesel	0	6	103		40	0	8.5	0.0					Construction Vehicles
194	P-19	Vaca Dixon, Tesla, and Pittsburg Substation Upgrades	Pickup - 1/2 Ton	395	Gasoline	4	2	102		40	320	27.3	1195.7					Construction Vehicles
195	P-19	Vaca Dixon, Tesla, and Pittsburg Substation Upgrades	Pickup - 1 Ton	410	Diesel	4	2	102		60	480	31.4	1559.4					Construction Vehicles
196	P-19	Vaca Dixon, Tesla, and Pittsburg Substation Upgrades	Welding Truck	395	Diesel	2	5	102		10	40	8.5	478.0					Construction Vehicles
197	P-19	Vaca Dixon, Tesla, and Pittsburg Substation Upgrades	Crane - 35 Ton (Manlift)	250	Diesel	2	10	102	0.29						0.4	7635.3		Construction Equipment
198	P-19	Vaca Dixon, Tesla, and Pittsburg Substation Upgrades	Forklift -15,000 lb	130	Diesel	1	4	102	0.2						0.4	547.6		Construction Equipment
199	P-19	Vaca Dixon, Tesla, and Pittsburg Substation Upgrades	Manlift - 40'	49	Diesel	3	10	102	0.31						0.4	2667.7		Construction Equipment
200	P-19	Vaca Dixon, Tesla, and Pittsburg Substation Upgrades	120' Manlift	74	Diesel	2	4	102	0.31						0.4	1074.3		Construction Equipment
201	L-20	Commissioning and Testing	Pickup - 1/2 Ton	395	Gasoline	4	2	174		40	320	27.3	2039.6					Construction Vehicles
202	L-20	Commissioning and Testing	Pickup - 1 Ton	410	Diesel	4	2	174		40	320	31.4	1773.4					Construction Vehicles
203	L-20	Commissioning and Testing	Manlift - 40'	49	Diesel	3	10	174	0.31						0.4	4550.7		Construction Equipment
204	L-20	Commissioning and Testing	Truck - Water 4 K	300	Diesel	1	10	174		40	80	8.5	1630.7					Construction Vehicles
205	L-20	Commissioning and Testing	Tool - Van/Conex 20'	0	NA	6	10	174										Construction Vehicles
206	L-20	Commissioning and Testing	Deck Barge	N/A	NA	1	2	174										Construction Vehicles
207	L-20	Commissioning and Testing	Tug Boat	3300	Diesel	2	6	174										Construction Vehicles
208	L-20	Commissioning and Testing	Support Vessel	200	Diesel	2	4	174										Construction Vehicles
209	L-20	Commissioning and Testing	Deck Generator	170	Diesel	1	8	174	0.74						0.4	9040.2		Construction Equipment
210	L-20	Commissioning and Testing	Crane - 35 Ton (Manlift)	250	Diesel	2	10	174	0.29						0.4	13024.9		Construction Equipment
211	L-21	Cleanup and Restoration	Pickup - 1 Ton	410	Diesel	4	2	140		40	320	31.4	1426.9					Construction Vehicles
212	L-21	Cleanup and Restoration	Motor Grader	250	Diesel	2	10	140	0.41						0.4	14816.3		Construction Equipment
213	L-21	Cleanup and Restoration	Backhoe - 2X4	68	Diesel	2	8	140	0.38						0.4	3321.9		Construction Equipment
214	L-21	Cleanup and Restoration	Truck - Water 4 K	300	Diesel	2	10	140		40	160	8.5	2624.1					Construction Vehicles
215	L-21	Cleanup and Restoration	Skid steer loader	74	Diesel	1	10	140	0.37						0.4	2200.0		Construction Equipment
216	L-21	Cleanup and Restoration	Excavator	250	Diesel	1	10	140	0.38						0.4	6866.1		Construction Equipment
217	L-21	Cleanup and Restoration	D6 Type Dozer	250	Diesel	1	10	140	0.4						0.4	7227.5		Construction Equipment
218	L-21	Cleanup and Restoration	Pickup - 1/2 Ton	395	Gasoline	4	2	140		40	320	27.3	1641.1					Construction Vehicles
219	L-21	Cleanup and Restoration	Truck - Dump 10-12 Yd	415	Diesel	2	10	140		40	160	6.0	3718.6					Construction Vehicles
220	L-01	Survey	Worker Commute	NA	Gasoline	4	NA	26		60	480	27.3	457.2					Worker Vehicles
221	L-02	Site Development/Staging Yards	Worker Commute	NA	Gasoline	12	NA	76		60	1440	27.3	4009.0					Worker Vehicles
222	L-03	Below-Grade Construction	Worker Commute	NA	Gasoline	40	NA	152		60	4800	27.3	26726.4					Worker Vehicles
223	L-04	Above-Grade Construction	Worker Commute	NA	Gasoline	30	NA	333		60	3600	27.3	43913.9					Worker Vehicles
224	P-05	Foundation Installation	Worker Commute	NA	Gasoline	15	NA	40		60	1800	27.3	2637.5					Worker Vehicles

EquipIndex	Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Quantity	Hours Per Day	Working Days	Load Factor	On Distance	VMT	On Efficiency	On Fuel Use	Off BSFC	Off Use	Helo Efficiency	Helo Use	Fuel Category
225	P-06	Structure Installation	Worker Commute	NA	Gasoline	15	NA	21		60	1800	27.3	1384.7					Worker Vehicles
226	P-07	Conductor Installation	Worker Commute	NA	Gasoline	30	NA	20		60	3600	27.3	2637.5					Worker Vehicles
227	L-08	Access Road Construction	Worker Commute	NA	Gasoline	12	NA	16		60	1440	27.3	844.0					Worker Vehicles
228	L-09	Foundation Installation	Worker Commute	NA	Gasoline	12	NA	22		60	1440	27.3	1160.5					Worker Vehicles
229	L-10	Structure Installation	Worker Commute	NA	Gasoline	12	NA	24		60	1440	27.3	1266.0					Worker Vehicles
230	L-11	Conductor Installation	Worker Commute	NA	Gasoline	30	NA	26		60	3600	27.3	3428.7					Worker Vehicles
231	L-12	Transition Structure Foundation Installation	Worker Commute	NA	Gasoline	20	NA	150		60	2400	27.3	13187.4					Worker Vehicles
232	L-13	Transition Structure Installation	Worker Commute	NA	Gasoline	20	NA	25		60	2400	27.3	2197.9					Worker Vehicles
233	L-14	Submarine Cable Installation	Worker Commute	NA	Gasoline	25	NA	147		60	3000	27.3	16154.5					Worker Vehicles
234	L-15	Southern Transition Approach Construction	Worker Commute	NA	Gasoline	25	NA	138		60	3000	27.3	15165.5					Worker Vehicles
235	L-16	Substation Getaways	Worker Commute	NA	Gasoline	20	NA	70		60	2400	27.3	6154.1					Worker Vehicles
236	P-17	Distribution Extension to Substation	Worker Commute	NA	Gasoline	10	NA	51		60	1200	27.3	2241.9					Worker Vehicles
237	L-18	Fiber Extension to Substation	Worker Commute	NA	Gasoline	12	NA	103		60	1440	27.3	5433.2					Worker Vehicles
238	P-19	Vaca Dixon, Tesla, and Pittsburg Substation Upgrades	Worker Commute	NA	Gasoline	15	NA	102		60	1800	27.3	6725.6					Worker Vehicles
239	L-20	Commissioning and Testing	Worker Commute	NA	Gasoline	24	NA	174		60	2880	27.3	18356.8					Worker Vehicles
240	L-21	Cleanup and Restoration	Worker Commute	NA	Gasoline	12	NA	140		60	1440	27.3	7384.9					Worker Vehicles

See Table 2, 3, 14, 15, 33, and 34 from Attachment 5.3-A: Air Quality Calculations for fuel efficiency calculations, construction schedule, and equipment list

Table 2: Fuel Consumption Summary

Vehicle Type	Gasoline	Diesel	Jet A
Worker Vehicles	181,467	-	-
Construction Vehicles	13,621	104,469	-
Construction Equipment	-	567,869	-
Helicopter and Support	-	-	16,428
Total	195,088	672,338	16,428