

**APPENDIX D**  
**ENERGY DATA**

Fuel Use

PhaseName	OffRoadEquipmentType	OffRoadE	UsageHours	HorsePower	Horsepower Category	Load Factor	Num Days	Year	Fuel Consumption Rate (gal/hour)	Total Fuel Consumption (gal/construction period)
SPS Site Preparation	Concrete/Industrial Saws	0	8	81	100	0.73	27	2020	4.7	0
SPS Site Preparation	Excavators	1	8	158	175	0.38	27	2020	2.9	237
SPS Site Preparation	Rubber Tired Dozers	1	8	247	300	0.4	27	2020	4.5	386
SPS Site Preparation	Tractors/Loaders/Backhoes	4	8	97	100	0.37	27	2020	1.6	508
BTR Site Preparation	Rubber Tired Dozers	0	8	247	300	0.4	11	2020	4.5	0
BTR Site Preparation	Tractors/Loaders/Backhoes	1	8	97	100	0.37	11	2020	1.6	52
BTR Access Road Grading	Air Compressors	0	6	78	100	0.48	25	2020	1.3	0
BTR Access Road Grading	Excavators	4	8	158	175	0.38	25	2020	2.9	877
BTR Access Road Grading	Graders	0	8	187	175	0.41	25	2020	3.1	0
BTR Access Road Grading	Rubber Tired Dozers	4	8	247	300	0.4	25	2020	4.5	1,429
BTR Access Road Grading	Scrapers	0	8	367	300	0.48	25	2020	5.6	0
BTR Access Road Grading	Tractors/Loaders/Backhoes	4	8	97	100	0.37	25	2020	1.6	470
Dewatering Activities	Cranes	0	7	231	300	0.29	52	2020	3.3	0
Dewatering Activities	Forklifts	0	8	89	100	0.2	52	2020	2.0	0
Dewatering Activities	Generator Sets	0	8	84	100	0.74	52	2020	5.2	0
Dewatering Activities	Pumps	4	24	84	100	0.74	52	2020	1.3	4,953
Dewatering Activities	Tractors/Loaders/Backhoes	0	7	97	100	0.37	52	2020	1.6	0
Dewatering Activities	Welders	0	8	46	50	0.45	52	2020	2.4	0
Paving Haul Roads	Excavators	0	8	158	175	0.38	25	2020	2.9	0
Paving Haul Roads	Graders	0	8	187	175	0.41	25	2020	3.1	0
Paving Haul Roads	Pavers	1	8	130	100	0.42	25	2020	1.7	146
Paving Haul Roads	Paving Equipment	1	8	132	100	0.36	25	2020	1.6	118
Paving Haul Roads	Rollers	1	8	80	100	0.38	25	2020	1.7	129
Paving Haul Roads	Rubber Tired Dozers	0	8	247	300	0.4	25	2020	4.5	0
Paving Haul Roads	Scrapers	0	8	367	300	0.48	25	2020	5.6	0
Paving Haul Roads	Tractors/Loaders/Backhoes	0	8	97	100	0.37	25	2020	1.6	0
Culvert Crossing Repair	Cement and Mortar Mixers	1	8	9	25	0.56	25	2020	0.4	43
Culvert Crossing Repair	Pavers	0	8	130	100	0.42	25	2020	1.7	0
Culvert Crossing Repair	Paving Equipment	0	8	132	100	0.36	25	2020	1.6	0
Culvert Crossing Repair	Rollers	0	8	80	100	0.38	25	2020	1.7	0
BTR Grading and Hauling	Excavators	4	8	158	175	0.38	132	2020	2.9	4,632
BTR Grading and Hauling	Graders	0	8	187	175	0.41	132	2020	3.1	0
BTR Grading and Hauling	Rubber Tired Dozers	4	8	247	300	0.4	132	2020	4.5	7,544
BTR Grading and Hauling	Scrapers	0	8	367	300	0.48	132	2020	5.6	0
BTR Grading and Hauling	Tractors/Loaders/Backhoes	4	8	97	100	0.37	132	2020	1.6	2,482
SPS Grading	Excavators	0	8	158	175	0.38	132	2020	2.9	0
SPS Grading	Graders	0	8	187	175	0.41	132	2020	3.1	0
SPS Grading	Rubber Tired Dozers	4	8	247	300	0.4	132	2020	4.5	7,544
SPS Grading	Scrapers	0	8	367	300	0.48	132	2020	5.6	0
SPS Grading	Tractors/Loaders/Backhoes	4	8	97	100	0.37	132	2020	1.6	2,482
SPS Construction	Cranes	0	7	231	300	0.29	79	2020	3.3	0
SPS Construction	Forklifts	0	8	89	100	0.2	79	2020	2.0	0
SPS Construction	Generator Sets	0	8	84	100	0.74	79	2020	5.2	0
SPS Construction	Rubber Tired Dozers	4	8	247	300	0.4	79	2020	4.5	4,515
SPS Construction	Tractors/Loaders/Backhoes	4	7	97	100	0.37	79	2020	1.6	1,300
SPS Construction	Welders	0	8	46	50	0.45	79	2020	2.4	0
Seasonal Stockpile/Crushing	Crushing/Proc. Equipment	1	8	85	100	0.78	52	2020	7.6	2,478
Seasonal Stockpile/Crushing	Generator Sets	1	8	84	100	0.74	52	2020	5.2	1,604
Seasonal Stockpile/Crushing	Tractors/Loaders/Backhoes	2	8	97	100	0.37	52	2020	1.6	489
SPS Paving	Pavers	1	8	130	100	0.42	52	2020	1.7	303
SPS Paving	Paving Equipment	1	8	132	100	0.36	52	2020	1.6	245
SPS Paving	Rollers	1	8	80	100	0.38	52	2020	1.7	268
Slope Protection Activity	Excavators	0	8	158	175	0.38	26	2020	2.9	0
Slope Protection Activity	Graders	0	8	187	175	0.41	26	2020	3.1	0
Slope Protection Activity	Rubber Tired Dozers	0	8	247	300	0.4	26	2020	4.5	0
Slope Protection Activity	Scrapers	0	8	367	300	0.48	26	2020	5.6	0
Slope Protection Activity	Tractors/Loaders/Backhoes	1	8	97	100	0.37	26	2020	1.6	122
Hydroblasting for Cement Slurry	Generator Sets	1	8	84	100	0.74	26	2020	5.2	802
Site Preparation	Rubber Tired Dozers	1	8	247	300	0.4	80	2025	4.5	1,144
Site Preparation	Tractors/Loaders/Backhoes	0	8	97	100	0.37	80	2025	1.6	0
Planting	Rubber Tired Dozers	1	6	247	300	0.4	53	2025	4.5	568

Total

47,868

Input	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Gasoline Consumption			Diesel Consumption		
							Worker	Vendor	Haul	Worker	Vendor	Haul
Phase Name												
SPS Site Preparation	30	10	0	19.8	10	20						
BTR Site Preparation	20	10	0	19.8	10	20						
BTR Access Road Grading	40	10	0	19.8	10	20						
Dewatering Activities	30	0	0	19.8	7.9	20						
Paving Haul Roads	6	0	0	19.8	7.9	20						
Culvert Crossing Repair	16	0	0	19.8	7.9	20						
BTR Grading and Hauling	96	10	0	19.8	10	20						
SPS Grading	50	0	0	19.8	7.9	20						
SPS Construction	0	10	0	19.8	7.9	20						
Seasonal Stockpile/Crushing	16	0	0	19.8	7.9	20						
SPS Paving	10	0	0	19.8	7.9	20						
Slope Protection Activity	0	0	0	19.8	7.9	20						
Hydroblasting for Cement Slt	6	0	0	19.8	7.9	20						
Sluicagate Repair	16	0	0	19.8	7.9	20						
Site Preparation	10	10	0	19.8	10	20						
Planting	10	20	0	19.8	10	20						
Site Preparation	10	10	0	19.8	10	20						
Planting	10	20	0	19.8	10	20						
Truck Travel	0	0	400	19.8	10	5						
<b>Adjusted</b>												
SPS Site Preparation	810	270	0	19.8	10	20	773	174	0	1	2	0
BTR Site Preparation	220	110	0	19.8	10	20	210	71	0	0	1	0
BTR Access Road Grading	1000	250	0	19.8	10	20	955	161	0	1	2	0
Dewatering Activities	1560	0	0	19.8	7.9	20	1,490	0	0	2	0	0
Paving Haul Roads	150	0	0	19.8	7.9	20	143	0	0	0	0	0
Culvert Crossing Repair	400	0	0	19.8	7.9	20	382	0	0	0	0	0
BTR Grading and Hauling	12672	1320	0	19.8	10	20	12,100	848	0	15	9	0
SPS Grading	6600	0	0	19.8	7.9	20	6,302	0	0	8	0	0
SPS Construction	0	790	0	19.8	7.9	20	0	401	0	0	4	0
Seasonal Stockpile/Crushing	832	0	0	19.8	7.9	20	794	0	0	1	0	0
SPS Paving	520	0	0	19.8	7.9	20	497	0	0	1	0	0
Slope Protection Activity	0	0	0	19.8	7.9	20	0	0	0	0	0	0
Hydroblasting for Cement Slt	156	0	0	19.8	7.9	20	149	0	0	0	0	0
Sluicagate Repair	416	0	0	19.8	7.9	20	397	0	0	0	0	0
Site Preparation	800	800	0	19.8	10	20	764	514	0	1	6	0
Planting	530	1060	0	19.8	10	20	506	681	0	1	7	0
Site Preparation	800	800	0	19.8	10	20	764	514	0	1	6	0
Planting	530	1060	0	19.8	10	20	506	681	0	1	7	0
Truck Travel	0	0	48000	19.8	10	5	0	0	461	0	0	41,142
<b>Total</b>							<b>26,732</b>	<b>4,045</b>	<b>461</b>	<b>33</b>	<b>44</b>	<b>41,142</b>