

## Energy Use Summary

<b>Construction Phase (gallons/construction period)</b>	<b>Gasoline</b>	<b>Diesel</b>		
Construction Vehicles	75,119	129,980		
Worker Trips	79,268	452		
Vendor Trips	175	4		
Haul Trucks	29	27,961		
<b>Total</b>	<b>154,592</b>	<b>158,397</b>		

  

<b>Operations Phase (gallons/year)</b>	<b>Gasoline</b>	<b>Diesel</b>	<b>Natural Gas (kBTU/yr)</b>	<b>Electricity (kWh/yr)</b>
Correctional Facility	662,972	335,498	48,043,938	14,401,398
All Land Uses	662,972	335,498	48,043,938	14,401,398



# Energy Use Summary

2026

	<b>Natural Gas Use</b>	<b>Electricity Use</b>
Land Use	kBTU/yr	kWh/yr
Land Use	48,043,938	14,401,398

0

<b>Total</b>	<b>48,043,938</b>	<b>14,401,398</b>
--------------	-------------------	-------------------

# Energy Use Summary

2026

PhaseName	OffRoadEquipmentType	OffRoadEquipmentUnitA	UsageHours	HorsePower	Load Factor	Horsepower Category	Num Days	Year	Fuel Consumption Rate		Total Fuel Consumption (gal/construction period)
		mount							(gal/hour)	Fuel Type	
Site Preparation	Rubber Tired Dozers	3	11	247	0.4	300	16	2024	4.6	Diesel	978
Site Preparation	Tractors/Loaders/Backhoes	3	11	97	0.37	100	16	2024	1.6	Diesel	311
Grading	Excavators	0	11	158	0.38	175	40	2024	2.9	Diesel	0
Grading	Graders	5	11	187	0.41	175	40	2024	3.2	Diesel	2,851
Grading	Rollers	3	11	80	0.38	100	40	2024	1.7	Diesel	850
Grading	Rubber Tired Dozers	5	11	247	0.4	300	40	2024	4.6	Diesel	4,075
Grading	Scrapers	6	11	367	0.48	300	40	2024	5.5	Diesel	7,003
Grading	Tractors/Loaders/Backhoes	0	11	97	0.37	100	40	2024	1.6	Diesel	0
Building Construction	Cranes	3	11	231	0.29	300	389	2024	3.3	Diesel	12,175
Building Construction	Forklifts	3	11	89	0.2	100	389	2024	2.0	Diesel	5,147
Building Construction	Generator Sets	1	11	84	0.74	100	389	2024	5.2	Gasoline	16,437
Building Construction	Tractors/Loaders/Backhoes	4	11	97	0.37	100	389	2024	1.6	Diesel	10,090
Building Construction	Welders	1	11	46	0.45	50	389	2024	2.4	Gasoline	4,645
Util Site Preparation	Crawler Tractors	1	11	212	0.43	175	27	2024	3.3	Diesel	423
Util Site Preparation	Excavators	2	11	85	0.78	175	27	2024	2.9	Diesel	1,337
Util Site Preparation	Rubber Tired Dozers	0	11	247	0.4	300	27	2024	4.6	Diesel	0
Util Site Preparation	Signal Boards	5	24	6	0.82	25	27	2024	0.6	Gasoline	1,525
Util Site Preparation	Tractors/Loaders/Backhoes	0	11	97	0.37	100	27	2024	1.6	Diesel	0
Util Grading	Crawler Tractors	1	11	212	0.43	175	103	2024	3.3	Diesel	1,614
Util Grading	Excavators	3	11	158	0.38	175	103	2024	2.9	Diesel	3,728
Util Grading	Graders	2	11	187	0.41	175	103	2024	3.2	Diesel	2,936
Util Grading	Rollers	2	11	80	0.38	100	103	2024	1.7	Diesel	1,459
Util Grading	Rubber Tired Dozers	0	11	247	0.4	300	103	2024	4.6	Diesel	0
Util Grading	Rubber Tired Loaders	1	11	203	0.36	300	103	2024	3.9	Diesel	1,604
Util Grading	Scrapers	2	11	367	0.48	300	103	2024	5.5	Diesel	6,011
Util Grading	Signal Boards	5	24	6	0.82	25	103	2024	0.6	Gasoline	5,817
Util Grading	Tractors/Loaders/Backhoes	4	11	97	0.37	100	103	2024	1.6	Diesel	2,672
Util Construction	Air Compressors	1	11	78	0.48	100	91	2024	1.3	Diesel	636
Util Construction	Cranes	1	11	231	0.29	300	91	2024	3.3	Diesel	949
Util Construction	Forklifts	1	11	89	0.2	100	91	2024	2.0	Diesel	401
Util Construction	Generator Sets	1	11	84	0.74	100	91	2024	5.2	Gasoline	3,845
Util Construction	Graders	1	11	187	0.41	175	91	2024	3.2	Diesel	1,297
Util Construction	Plate Compactors	1	11	8	0.43	25	91	2024	0.3	Gasoline	135
Util Construction	Pumps	1	11	84	0.74	100	91	2024	1.3	Diesel	993
Util Construction	Scrapers	1	11	367	0.48	300	91	2024	5.5	Diesel	2,655
Util Construction	Signal Boards	5	24	6	0.82	25	91	2024	0.6	Gasoline	5,139
Util Construction	Tractors/Loaders/Backhoes	3	11	97	0.37	100	91	2024	1.6	Diesel	1,770
Util Construction	Welders	0	11	46	0.45	50	91	2024	2.4	Gasoline	0
Mobilization	Cranes	1	11	231	0.29	300	10	2024	3.3	Diesel	104
Mobilization	Rubber Tired Dozers	0	11	247	0.4	300	10	2024	4.6	Diesel	0
Mobilization	Tractors/Loaders/Backhoes	0	11	97	0.37	100	10	2024	1.6	Diesel	0
General Site	Pavers	1	11	130	0.42	100	150	2024	1.7	Diesel	1,198
General Site	Plate Compactors	1	11	8	0.43	25	150	2024	0.3	Gasoline	222
General Site	Rubber Tired Dozers	0	11	247	0.4	300	150	2024	4.6	Diesel	0
General Site	Tractors/Loaders/Backhoes	1	11	97	0.37	100	150	2024	1.6	Diesel	973
Headworks	Air Compressors	1	11	78	0.48	100	135	2024	1.3	Diesel	944
Headworks	Cranes	1	11	231	0.29	300	135	2024	3.3	Diesel	1,408
Headworks	Forklifts	2	11	89	0.2	100	135	2024	2.0	Diesel	1,191
Headworks	Generator Sets	1	11	84	0.74	100	135	2024	5.2	Gasoline	5,704
Headworks	Tractors/Loaders/Backhoes	0	11	97	0.37	100	135	2024	1.6	Diesel	0
Headworks	Welders	1	11	46	0.45	50	135	2024	2.4	Gasoline	1,612
Secondary	Aerial Lifts	3	11	63	0.31	75	125	2024	1.1	Diesel	1,424
Secondary	Cranes	3	11	231	0.29	300	125	2024	3.3	Diesel	3,912
Secondary	Forklifts	0	11	89	0.2	100	125	2024	2.0	Diesel	0
Secondary	Generator Sets	0	11	84	0.74	100	125	2024	5.2	Gasoline	0
Secondary	Tractors/Loaders/Backhoes	0	11	97	0.37	100	125	2024	1.6	Diesel	0
Secondary	Welders	1	11	46	0.45	50	125	2024	2.4	Gasoline	1,493
Tertiary	Air Compressors	1	11	78	0.48	100	189	2024	1.3	Diesel	1,321
Tertiary	Cranes	2	11	231	0.29	300	189	2024	3.3	Diesel	3,943
Tertiary	Forklifts	1	11	89	0.2	100	189	2024	2.0	Diesel	834
Tertiary	Generator Sets	0	11	84	0.74	100	189	2024	5.2	Gasoline	0

Tertiary	Tractors/Loaders/Backhoes	0	11	97	0.37	100	189	2024	1.6	Diesel	0
Tertiary	Welders	1	11	46	0.45	50	189	2024	2.4	Gasoline	2,257
Disinfection	Cranes	1	11	231	0.29	300	115	2024	3.3	Diesel	1,200
Disinfection	Forklifts	1	11	89	0.2	100	115	2024	2.0	Diesel	507
Disinfection	Generator Sets	0	11	84	0.74	100	115	2024	5.2	Gasoline	0
Disinfection	Tractors/Loaders/Backhoes	0	11	97	0.37	100	115	2024	1.6	Diesel	0
Disinfection	Welders	1	11	46	0.45	50	115	2024	2.4	Gasoline	1,373
Solids Handling	Cranes	1	11	231	0.29	300	135	2024	3.3	Diesel	1,408
Solids Handling	Forklifts	2	11	89	0.2	100	135	2024	2.0	Diesel	1,191
Solids Handling	Generator Sets	0	11	84	0.74	100	135	2024	5.2	Gasoline	0
Solids Handling	Plate Compactors	1	11	8	0.43	25	135	2024	0.3	Gasoline	200
Solids Handling	Tractors/Loaders/Backhoes	1	11	97	0.37	100	135	2024	1.6	Diesel	875
Solids Handling	Welders	1	11	46	0.45	50	135	2024	2.4	Gasoline	1,612
Aeration	Cranes	0	11	231	0.29	300	80	2024	3.3	Diesel	0
Aeration	Forklifts	1	11	89	0.2	100	80	2024	2.0	Diesel	353
Aeration	Generator Sets	0	11	84	0.74	100	80	2024	5.2	Gasoline	0
Aeration	Tractors/Loaders/Backhoes	0	11	97	0.37	100	80	2024	1.6	Diesel	0
Aeration	Welders	1	11	46	0.45	50	80	2024	2.4	Gasoline	955
EI&C	Cranes	0	11	231	0.29	300	210	2024	3.3	Diesel	0
EI&C	Forklifts	1	11	89	0.2	100	210	2024	2.0	Diesel	926
EI&C	Generator Sets	0	11	84	0.74	100	210	2024	5.2	Gasoline	0
EI&C	Tractors/Loaders/Backhoes	1	11	97	0.37	100	210	2024	1.6	Diesel	1,362
EI&C	Welders	0	11	46	0.45	50	210	2024	2.4	Gasoline	0
Percolation ponds	Cranes	0	11	231	0.29	300	70	2024	3.3	Diesel	0
Percolation ponds	Excavators	1	11	158	0.38	175	70	2024	2.9	Diesel	845
Percolation ponds	Forklifts	0	11	89	0.2	100	70	2024	2.0	Diesel	0
Percolation ponds	Generator Sets	0	11	84	0.74	100	70	2024	5.2	Gasoline	0
Percolation ponds	Tractors/Loaders/Backhoes	0	11	97	0.37	100	70	2024	1.6	Diesel	0
Percolation ponds	Welders	0	11	46	0.45	50	70	2024	2.4	Gasoline	0
Util Paving	Pavers	1	11	130	0.42	100	40	2024	1.7	Diesel	319
Util Paving	Paving Equipment	1	11	132	0.36	100	40	2024	1.6	Diesel	259
Util Paving	Rollers	2	11	80	0.38	100	40	2024	1.7	Diesel	567
Util Paving	Signal Boards	5	24	6	0.82	25	40	2024	0.6	Gasoline	2,259
Util Paving	Tractors/Loaders/Backhoes	1	11	97	0.37	100	40	2024	1.6	Diesel	259
Paving	Pavers	2	11	130	0.42	100	29	2024	1.7	Diesel	463
Paving	Paving Equipment	2	11	132	0.36	100	29	2024	1.6	Diesel	376
Paving	Rollers	2	11	80	0.38	100	29	2024	1.7	Diesel	411
Demobilization	Cranes	1	7	231	0.29	300	10	2024	3.3	Diesel	66
Demobilization	Forklifts	0	8	89	0.2	100	10	2024	2.0	Diesel	0
Demobilization	Generator Sets	0	8	84	0.74	100	10	2024	5.2	Gasoline	0
Demobilization	Tractors/Loaders/Backhoes	0	7	97	0.37	100	10	2024	1.6	Diesel	0
Demobilization	Welders	0	8	46	0.45	50	10	2024	2.4	Gasoline	0
Architectural Coating	Air Compressors	4	11	78	0.48	100	28	2024	1.3	Diesel	783
Phase 2 Building	Cranes	3	11	231	0.29	300	367	2024	3.3	Diesel	11,486
Phase 2 Building	Forklifts	3	11	89	0.2	100	367	2024	2.0	Diesel	4,856
Phase 2 Building	Generator Sets	1	11	84	0.74	100	367	2024	5.2	Gasoline	15,507
Phase 2 Building	Tractors/Loaders/Backhoes	4	11	97	0.37	100	367	2024	1.6	Diesel	9,519
Phase 2 Building	Welders	1	11	46	0.45	50	367	2024	2.4	Gasoline	4,382
Phase 2 Architectural Coating	Air Compressors	4	11	78	0.48	100	26	2024	1.3	Diesel	727
<b>Total</b>										<b>205,100</b>	
<b>Total</b>										<b>75,119</b>	
<b>Total</b>										<b>129,980</b>	

# Energy Use Summary

Year 2026

Vehicle Types	MPG by Fuel Type			Population by Fuel Type			
	GAS	DSL	ELEC	GAS	DSL	ELEC	Total
LDA	34.4	53.9		6,890,013	71,374	232,749	6,961,387
LDT1	29.3	24.3		820,893	277	13,403	821,171
LDT2	28.2	39.6		2,406,087	19,279	50,413	2,425,365
LHDT1	11.1	22.9		173,057	143,072		316,129
LHDT2	9.6	20.7		30,381	57,538		87,918
MCY	36.2			330,653			330,653
MDV	22.8	30.5		1,623,219	43,701	32,680	1,666,920
MH	5.5	11.1		33,697	14,107		47,804
MHDT	5.4	11.7		26,201	137,838		164,039
HHDT	4.6	7.5		74	116,234		116,307
OBUS	5.4	9.2		5,959	4,901		10,860
SBUS	9.5	8.0		3,247	6,784		10,032
UBUS	5.5	5.7		975	6	16	981

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												
Site Preparation	15	0	0	10.8	7.3	20						
Grading	48	0	0	10.8	7.3	20						
Building Construction	238	0	2890	10.8	7.3	20						
Util Site Preparation	34	0	0	10.8	7.3	20						
Util Grading	64	0	0	10.8	7.3	20						
Util Construction	50	0	200	10.8	7.3	20						
Mobilization	8	0	5	10.8	7.3	20						
General Site	6	0	72	10.8	7.3	20						
Headworks	8	0	68	10.8	7.3	20						
Secondary	4	0	0	10.8	7.3	20						
Tertiary	12	0	38	10.8	7.3	20						
Disinfection	4	0	26	10.8	7.3	20						
Solids Handling	12	0	40	10.8	7.3	20						
Aeration	4	0	8	10.8	7.3	20						
EI&C	4	0	44	10.8	7.3	20						
Percolation ponds	4	8	4241	10.8	7.3	20						
Util Paving	44	0	0	10.8	7.3	20						
Paving	15	0	0	10.8	7.3	20						
Demobilization	144	0	8	10.8	7.3	20						
Architectural Coating	46	0	0	10.8	7.3	20						
Phase 2 Building	238	0	2890	10.8	7.3	20						
Phase 2 Architectural Coatin	46	0	0	10.8	7.3	20						
<b>Adjusted</b>												
Site Preparation	240	0	0	10.8	7.3	20	91	0	0	1	0	0
Grading	1920	0	0	10.8	7.3	20	730	0	0	4	0	0
Building Construction	92582	0	2890	10.8	7.3	20	35,179	0	8	201	0	7,674
Util Site Preparation	918	0	0	10.8	7.3	20	349	0	0	2	0	0
Util Grading	6592	0	0	10.8	7.3	20	2,505	0	0	14	0	0
Util Construction	4550	0	200	10.8	7.3	20	1,729	0	1	10	0	531
Mobilization	80	0	5	10.8	7.3	20	30	0	0	0	0	13
General Site	900	0	72	10.8	7.3	20	342	0	0	2	0	191
Headworks	1080	0	68	10.8	7.3	20	410	0	0	2	0	181
Secondary	500	0	0	10.8	7.3	20	190	0	0	1	0	0
Tertiary	2268	0	38	10.8	7.3	20	862	0	0	5	0	101
Disinfection	460	0	26	10.8	7.3	20	175	0	0	1	0	69
Solids Handling	1620	0	40	10.8	7.3	20	616	0	0	4	0	106
Aeration	320	0	8	10.8	7.3	20	122	0	0	1	0	21
EI&C	840	0	44	10.8	7.3	20	319	0	0	2	0	117
Percolation ponds	280	560	4241	10.8	7.3	20	106	175	12	1	4	11,261
Util Paving	1760	0	0	10.8	7.3	20	669	0	0	4	0	0
Paving	435	0	0	10.8	7.3	20	165	0	0	1	0	0
Demobilization	1440	0	8	10.8	7.3	20	547	0	0	3	0	21
Architectural Coating	1288	0	0	10.8	7.3	20	489	0	0	3	0	0
Phase 2 Building	87346	0	2890	10.8	7.3	20	33,189	0	8	189	0	7,674
Phase 2 Architectural Coatin	1196	0	0	10.8	7.3	20	454	0	0	3	0	0
<b>Total</b>							<b>79,268</b>	<b>175</b>	<b>29</b>	<b>452</b>	<b>4</b>	<b>27,961</b>