

## Concrete Take-Off

### Unit - 1 Concrete Foundation

Description	Thickness (inch)	Count	Area (SF)	Volume (CF)
Fire Hydrant Pad	6"	2	50.00	25.00
Oily Drain Tank Foundation	12"	1	102.00	102.00
Ladder Pad Foundation	15"	2	16.52	20.65
SCR Foundation	15"	2	198.75	248.44
Stair Pad Foundation	15"	1	16.00	20.00
Auxiliary MCC Foundation	33"	1	45.00	123.75
Auxiliary Skid Foundation	33"	1	171.00	470.25
CEMS Foundation	33"	1	110.25	303.19
Combination Safety Shower/Eye Wash Foundation Pad	33"	1	64.00	176.00
Cooling Tower Mack-up Pump Skid Foundation	33"	1	35.00	96.25
Engine Removal Foundation	33"	1	112.00	308.00
Gas Conditioning Foundation	33"	1	45.00	123.75
Pipe Rack 1 Foundation Pad	33"	1	40.00	110.00
Reclaim Water Unloading Pump Skid Foundation	33"	1	81.00	222.75
SCR Foundation	33"	6	1305.50	3590.13
SCR MCC Foundation Pad	33"	1	27.00	74.25
Sprint Skid Foundation	33"	1	27.00	74.25
Tank Transfer Pump Skid Foundation	33"	1	35.00	96.25
Waste Water Storage Tank Foundation	33"	1	346.39	952.56
Water Injection Skid Foundation	33"	1	60.00	165.00
Reclaim water Storage Tank Foundation	36"	1	1590.49	4771.46
Stack Foundation	48"	1	676.00	2704.00
Turbine Generator Foundation	54"	1	1353.00	6088.50
<b>Total</b>		<b>31</b>	<b>6506.90</b>	<b>20866.43</b>

Description	Size (dia.)	Count	Height / Drill Pier	Volume (CF)
Concrete Drill Pier	6' - 0"	9	18' - 0"	4580.41
<b>Total</b>				<b>4580.41</b>

### Unit - 1 Concrete Column

Description	Size	Count	Height / Column	Volume (CF)
Concrete Rectangular Column	5' - 0"x2' - 0"	9	48' - 0"	4320.00
<b>Total</b>				<b>4320.00</b>

### Unit - 2 Concrete Foundation

Description	Thickness (inch)	Count	Area (SF)	Volume (CF)
69 KV Transition Structure & Pothead Foundation Pad	4"	1	25.15	8.38
69 KV CT-VT Metering Unit Foundation Pad	4"	1	25.15	8.38
69 KV Disconnect Switch and Support Foundation Pad	4"	3	91.87	30.62
Fire Hydrant Pad	6"	1	25.00	12.50
69 KV Circuit Breaker Foundation Pad	6"	2	33.78	16.89
Breaker Foundation	6"	8	19.44	9.72
Ammonia Storage Foundation Equipment Pad	6.5"	1	247.50	134.06
13.8 KV-69 KV Generator Step-up Transformer Foundation Pad	12"	1	1079.34	1079.34
SCR Foundation Pad	15"	2	198.75	248.44
Fin Fan Foundation Pad	15"	2	12.50	15.63
SCR MCC Foundation Pad	15"	1	27.00	33.75
Stair Foundation Pad	15"	1	16.00	20.00
Ladder Pad Foundation	15"	1	10.50	13.13
Ammonia Storage Equipment Pad	24"	1	247.50	495.00
Transformer Foundation Pad	30"	1	1347.56	3368.89
480V Switchgear Foundation	33"	1	123.75	340.31
13.8KV Switchgear Foundation Pad	33"	2	383.50	1054.62
Engine Removal Foundation Pad	33"	1	112.00	308.00
Sprint Skid Foundation Pad	33"	1	27.00	74.25
480 XFMR Foundation	33"	2	147.00	404.25
4160 XFMR Foundation	33"	2	147.00	404.25
4160V MCC Foundation Pad	33"	1	351.00	965.25
Auxiliary MCC Foundation	33"	1	45.00	123.75
Auxiliary Skid Foundation Pad	33"	1	171.00	470.25
Black Start Natural Gas Generator Foundation Pad	33"	1	262.50	721.88
CEMS Foundation Pad	33"	1	110.25	303.19
Combination Safety Shower/Eye Wash Foundation Pad	33"	2	128.00	352.00
Cooling Tower and Chiller Foundation Pad	33"	1	1603.88	4410.67
Equipment Pad	33"	1	60.00	165.00
Fin Fan Foundation Pad	33"	2	315.00	866.25
Fire Valve Enclosure Foundation	33"	1	98.00	269.50
Fuel Gas Compressor Foundation	33"	2	572.00	1573.00
Fuel MCC Foundation	33"	1	27.00	74.25
Gas Conditioning Foundation Pad	33"	1	45.00	123.75
Pipe Rack 1 Foundation Pad	33"	4	160.00	440.00
Pipe Rack 2 Foundation Pad	33"	3	84.00	231.00
Water Injection Skid Foundation Pad	33"	1	40.00	110.00
Recycle Cooler Foundation	33"	2	176.00	484.00
SCR Foundation Pad	33"	6	1305.50	3590.12
Stack Foundation Pad	48"	1	676.00	2704.00
Ammonia Storage Foundation Equipment Pad	48.75"	2	32.00	130.00
Ammonia Storage Foundation Equipment Pad	52"	1	42.67	184.89
Turbine/Generator Foundation Pad	54"	1	1353.00	6088.50
<b>Total</b>		<b>73</b>	<b>12005.09</b>	<b>32461.66</b>

Description	Size (dia.)	Count	Height / Drill Pier	Volume (CF)
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Concrete Drill Pier	5' - 0"	12	21' - 0"	4948.01
Concrete Drill Pier	6' - 0"	25	18' - 0"	12723.36
<b>Total</b>				<b>17671.37</b>

**Unit - 2 Concrete Slab**

Description	Thickness (inch)	Area (SF)	Volume (CF)
Sump Pit	8"	15.55	10.37
Ammonia Storage Foundation Slab	8"	696.11	464.07
Ammonia Storage Sump Pit Slab	8"	15.34	10.23
Ammonia Unloading Containment Slab	10"	684.75	570.62
GC Oily Drain Tank Foundation Slab	12"	49.50	49.50
Oily Drain Tank Slab	12"	204.00	204.00
Transformer Slab	8"	289.17	192.78
<b>Total</b>		<b>1954.42</b>	<b>1501.57</b>

<b>Additional Concrete Volume</b>	<b>Volume (CF)</b>
<b>Total Additional Concrete Volume</b>	<b>6.28</b>

**Unit - 2 Concrete Column**

Description	Size	Count	Height / Column	Volume (CF)
Concrete Rectangular Column	5' - 0"x2' - 0"	25	48' - 0"	12000.00
Concrete Rectangular Column	4' - 0"x2' - 0"	12	48' - 0"	4608.00
Concrete Rectangular Column	2' - 6"x2' - 6"	8	9' - 8"	386.80
<b>Total</b>				<b>16994.80</b>

**Service Building Concrete Foundation**

Description	Thickness (inch)	Count	Area (SF)	Volume (CF)
Electrical/Diesel Fire Pump Foundation	6"	1	356.50	178.25
Maintenance Pad	6"	1	11.67	5.83
Air Compressure Foundation	6"	1	80.00	40.00
Fire Hydrant Pad	6"	3	75.00	37.50
Fresh Water Unloading Pump Skid Foundation	12"	1	35.00	35.00
Oily Drain Tank Foundation	12"	1	102.00	102.00
Water MCC Foundation	12"	1	27.00	27.00
Ladder Pad	15"	1	5.97	7.47
Blow Down Pad	18"	1	36.00	54.00
Diesel Fuel Tank Foundation	30"	1	48.00	120.00
R/O Skid Foundation	30"	1	625.00	1562.50
Demin Water Trailer Pad Foundation	33"	1	816.21	2244.58
Demin Water Pump Skid Foundation	33"	1	80.00	220.00
Raw Water Pump Skid Foundation	33"	1	82.50	226.88
Raw Water Storage Tank Foundation	42"	1	2734.04	9569.15
Demin Water Storage Tank Foundation	36"	1	855.34	2566.02
<b>Total</b>		<b>18</b>	<b>5970.23</b>	<b>16996.18</b>

Description	Size	Count	Volume (CF)
Rectangular Footing - 1	5' - 0"x5' - 0"x2' - 6"	12	750.00
Continuous Footing	1' - 4"x2' - 6"	13	684.42
<b>Total</b>			<b>1434.42</b>

**Service Building Concrete Slab**

Description	Thickness (inch)	Area (SF)	Volume (CF)
Slab	6"	6441.19	3220.60
Slab	8"	32.11	21.41
Floor Drain Slab	8"	32.11	21.41
<b>Total</b>		<b>6505.41</b>	<b>3263.42</b>

<b>Additional Concrete Volume</b>	<b>Volume (CF)</b>
<b>Total Additional Concrete Volume</b>	<b>1053.34</b>

**Pala Bridge Concrete Foundation**

Description	Size	Count	Volume (CF)
Continuous Footing	4' - 0"x2' - 8"	1	631.73
Retaining Footing	4' - 0"x2' - 8"	6	1929.52
<b>Total</b>			<b>2561.25</b>

**Pala Bridge Concrete Slab**

Description	Thickness (inch)	Area (SF)	Volume (CF)
Slab	1"	454.76	37.90
Slab	8"	672.04	448.03
Slab	10"	2600.63	2167.19
Aproch Slab	12"	1805.87	1805.87
<b>Total</b>		<b>5533.30</b>	<b>4458.99</b>

<b>Additional Concrete Volume</b>	<b>Volume (CF)</b>
<b>Total Additional Concrete Volume</b>	<b>28.52</b>

**Pala Bridge Concrete Column**

Description	Size (dia.)	Count	Height / Column	Volume (CF)
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Concrete Round Column (Pile)	2' - 0"	16	25' - 0"	1256.62
<b>Total</b>				<b>1256.62</b>

Unit - 1 Concrete Wall				
Description	Width (Ft.-Inch)	Length (Ft.-Inch)	Surface Area (SF)	Volume (CF)
Concrete Pre-Cast Whisper Wall- 8"	0' - 8"	156' - 11 13/32"	7278.69	4852.46
Concrete Oily Drain Tank Foundation Wall- 8"	0' - 8"	38' - 4"	95.83	63.89
<b>Total</b>		<b>195' - 3 13/32"</b>	<b>7374.52</b>	<b>4916.35</b>

Unit - 2 Concrete Wall				
Description	Width (Ft.-Inch)	Length (Ft.-Inch)	Surface Area (SF)	Volume (CF)
Concrete Wall	0' - 8"	100' - 9"	133.67	89.11
Concrete Foundation Wall	0' - 8"	38' - 4"	95.83	63.89
Concrete Foundation Wall	1' - 0"	76' - 8 15/32"	775.65	775.65
Concrete Pre-cast Whisper Wall	0' - 8"	646' - 7 7/16"	30506.13	20337.42
Concrete Sump Wall	0' - 8"	17' - 3 31/32"	5.78	3.85
Concrete Ammonia Storage Foundation Wall	0' - 8"	82' - 7"	320.44	213.57
Concrete Ammonia Storage Foundation Wall	0' - 11"	5' - 7"	6.86	5.06
Ammonia Unloading Containment Foundation Wall	0' - 8"	101' - 8 17/32"	425.77	283.85
GC Oily Drain Tank Foundation Wall	0' - 8"	26' - 4"	65.83	43.89
Oily Drain Tank Foundation Wall	0' - 8"	38' - 4"	95.83	63.89
Transformer Foundation Wall	1' - 0"	96' - 0"	1008.00	1008.00
<b>Total</b>		<b>1230' - 3 13/32"</b>	<b>33439.79</b>	<b>22888.18</b>

Service Building Concrete Wall				
Description	Width (Ft.-Inch)	Length (Ft.-Inch)	Surface Area (SF)	Volume (CF)
Oily Drain Tank Foundation Wall	0' - 8"	38' - 4"	95.83	63.89
Floor Drain Wall	0' - 10"	19' - 4"	154.67	128.89
Sump Wall	0' - 10"	19' - 4"	154.67	128.89
<b>Total</b>		<b>77' - 0"</b>	<b>405.17</b>	<b>321.67</b>

Pala Bridge Concrete Wall				
Description	Width (Ft.-Inch)	Length (Ft.-Inch)	Surface Area (SF)	Volume (CF)
Concrete Abutment Wall	2' - 6"	78' - 0"	417.96	1044.90
Concrete Abutment Wall	0' - 6"	78' - 0 3/32"	183.99	91.76
Concrete Barrier Wall	0' - 8"	200' - 4 9/16"	838.13	471.23
Concrete Wing Wall	1' - 0"	113' - 1 1/4"	991.30	979.63
<b>Total</b>		<b>469' - 5 29/32"</b>	<b>2431.38</b>	<b>2587.52</b>