

EMH&T	Subject: MSE WALL B ESTIMATED QUANTITIES
	DPN: - PLO: 121442
	Date: 3/12/2021 Job No.: 20110903
	Compiled: RJE Checked: MJR

MSE WALL QUANTITIES - WALL B																			
Length of Segment	Wall Sta.	Top of Wall Elev	Top Leveling Pad Elev	Wall Height	Strap Length Factor	Strap Length Calc	Strap Length	Undercut	In Front	Behind	Behind OFFSET	Total Payment Width	203 - Embankment	203 - Granular Material, Type B, As Per Plan	203 - Granular Material, Type C	840 - Wall Excavation	840 - Select Granular Backfill	840 - Natural Soil	
Wall Length			Wall Height			Strap Length		ft	ft	ft	ft	ft	Sq. Ft.	Cu. Ft.	Sq. Ft.	Cu. Ft.	Sq. Ft.	Cu. Ft.	
27.96	-	+13.98	554.63	544.50	10.13	0.70	7.09	8.00	1.0	1.77	10.00	10.46	12.23	-	-	12.3	343.0916	2.05	700.9514
11	-	+13.46	555.75	542.00	13.75	0.70	9.63	9.75	1.0	1.77	11.75	12.21	13.98	-	-	14.0	154.2288	4.76	731.9492
11	-	+44.46	556.37	539.50	16.87	0.70	11.81	12.00	1.0	1.77	14.00	14.46	16.23	-	-	16.3	178.9788	7.36	1315.913
11	-	+55.46	556.99	537.00	19.99	0.70	13.99	14.00	1.0	1.77	16.00	16.48	18.23	-	-	18.3	250.9768	9.96	1265.31
11	-	+66.46	557.58	534.50	23.08	0.70	16.16	16.25	1.0	1.77	18.25	18.71	20.48	-	-	20.5	225.7288	12.30	2770.831
12.94	-	+78.43	558.22	532.00	26.22	0.70	18.35	18.50	1.0	1.77	20.50	20.96	22.73	-	-	-	-	-	396.276
8.29	-	+89.05	558.88	532.00	26.88	0.70	18.82	19.00	1.0	1.77	21.00	21.46	23.23	-	-	-	-	-	4359.076
21.71	-	+104.05	558.88	532.00	26.88	0.70	18.82	19.00	1.0	1.77	21.00	21.46	23.23	-	-	235.6453	5115.857	24.0	250.9884
12.44	-	+121.12	558.88	534.50	24.38	0.70	17.07	17.25	1.0	1.77	19.25	19.71	21.48	-	-	217.71	2708.312	24.0	268.9202
Deductions for Overlap												TOTAL (Cu.Ft.):							
												TOTAL (Cu.Yd.):							
												0.0							
												0							
												7824.2							
												1921.9							
												22533.7							
												21479.6							
												-2177.17							
												0.0							

Notes:
1) Excavation and Natural Soil volumes increased 10% to account for uncertainties associated with corner in MSE wall and general grading.

203E20000 - Embankment
Top of Footing El = 547.25
Bottom of Granular Material Type B = 546.25
Width of Item 203 paid for in MSE Wall Quantities = 8.5 ft
Elevational Area of Item 203 = 13.34
Volume = 5 CY

203E35111 - Granular Material, Type B, As Per Plan
Volume = 290 CY

203E65000 - Special - Settlement Platform
1 Each

503E11101 - Cofferdams and Excavation Bracing, As Per Plan
Lump Sum \$2,000

512E10001 - Sealing of Concrete Surfaces, As Per Plan
512E10101 - Sealing of Concrete Surfaces (Epoxy Urethane), As Per Plan
Front Area (includes coping, doesn't include barrier) = 1282.42 SF (Cad)
Top of MSE Wall Coping and Bottom of Lip Width = 1.54166667 FT
Length = 138.59 FT
Area = 213.659583 SF
Barrier Sealing Perimeter = 7.9 FT
Barrier Length = 54.4375 FT
Barrier Sealing Area = 430.05625 SF
Total Area = 1926.13583 SF
say 215 SY

516E13200 - 1/2" Preformed Expansion Joint Filler
Length = 33.49 ft
Width = 0.5 ft
Number of Sides = 2
Total Area = 34 SF

517E76300 - Railing, Misc.: Traffic Barrier on MSE Wall
Length = 93 ft

601E21000 - Concrete Slope Protection
Length = 33.49 ft
Width = 1.83333 ft
Area = 2 SY

690E98400 - Special - Misc.: Temporary Surcharge
Cost = \$50,000

840E20001 - Mechanically Stabilized Earth Wall, As Per Plan
Cad Area = 2082 SF

840E21000 - Wall Excavation
Volume = 835 CY

840E22000 - Foundation Preparation
Plan Area (Cad) = 1964.86 SF
say 218 SY

840E23000 - Select Granular Backfill
Volume = 798 CY

840E25010 - 6" Drainage Pipe, Perforated
Length = 230 FT

840E25020 - 6" Drainage Pipe, Non-Perforated
Length (Cad) = 3 FT

840E26000 - Concrete Coping
Length = 138 FT

840E26050 - Aesthetic Surface Treatment
Area is the item 840E20001 quantity minus the area of the coping
Cad Area = 1808 SF

840E27000 - On-Site Assistance
1 Day