BRIDGE: LOG-273-0296

SFN: 4602359

ESTIMATED QUANTITIES

CALCULATED BY: AMR
CHECKED BY: STK

DATE: 05/15/19 **DATE:** 05/15/19

CARPENTER MARTY transportation

ITEM ITEM EXT. DESCRIPTION
202 11000 STRUCTURE REMOVED

Existing structure length = 76.00 ft.

Existing structure width = 19.00 ft.

Area of deck = 1,444.00 ft^2

71104 01 4001

Total Quantity = LUMP

204 30021 GRANULAR MATERIAL, TYPE C, AS PER PLAN

Thickness of granular material = 2.00 ft.

Area under box culvert and footings = 1,475.54 ft^2

Contingency quantity included for unsuitable material = 60 CY

Total Quantity = 170 CY

204 50001 GEOTEXTILE FABRIC, AS PER PLAN

Area under box culvert and footings = 1,475.54 ft^2

Contingency quantity included for unsuitable material = 90 SY

Total Quantity = 254 SY

503 11100 COFFERDAMS AND EXCAVATION BRACING

Total Quantity = LUMP

503 21300 UNCLASSIFIED EXCAVATION

Inlet Volume from Microstation = 52 CY
Outlet Volume from Microstation = 48 CY

Total Quantity = LUMP

509 10000 EPOXY COATED REINFORCING STEEL

Wingwall quantity = 1,084 #

Footing and cutoff wall quantity = 2,532 #

Headwall quantity = 320 #

Total Wingwall Quantity = 237.86 ft³

Total Quantity = 3,936 LB

511 46011 CLASS QC1 CON	CRETE, RETA	AINING/WINGW	ALL NOT INCL	UDING FOOTIN	G, AS PER PLAN	
WINGWALL	Wall #1	Wall #2	Wall #3	Wall #4		
Wingwall thickness =	1.00 ft.	1.00 ft.	1.00 ft.	1.00 ft.		
Top of wall elevation =	1008.84	1008.84	1008.60	1008.60		
Top of sloped end elevation =	1006.51	1006.17	1005.77	1006.10		
Top of footing elevation =	1001.34	1001.34	1001.10	1001.10		
Sloped wingwall length =	7.65 ft.	12.00 ft.	5.25 ft.	12.00 ft.		
Height of walls at tall end =	7.50 ft.	7.50 ft.	7.50 ft.	7.50 ft.		
Height of walls at sloped end =	5.17 ft.	4.83 ft.	4.67 ft.	5.00 ft.		
Volume =	48.46 ft^3	73.98 ft^3	31.95 ft^3	75.00 ft^3		
Plan area of corner =	0.00 ft^2	0.58 ft^2	0.00 ft^2	0.55 ft^2		
Height of walls at tall end =	7.50 ft.	7.50 ft.	7.50 ft.	7.50 ft.		
Volume =	0.00 ft^3	4.35 ft^3	0.00 ft^3	4.13 ft^3		

LOG-273-0296 SFN: 4602359 Designer: <u>AMR</u> Date: <u>\$/15/19</u> Checker: <u>\$7/4</u> Date: <u>\$/15/19</u>

UEADWALL					
HEADWALL	Inlet	Outlet			
Top of wall elevation =	1008.84	1008.60			
Top of culvert elevation =	1007.34	1007.10			
Height of wall =	1.50 ft.	1.50 ft.			
Thickness of wall =	1.00 ft.	1.00 ft.			
Length of wall =	14.00 ft.	14.00 ft.			
Number of walls =	1	1			
Volume =	21.00 ft^3	21.00 ft^3			
Total Headwall Quantity =	42 00 ft^3				
Total Quantity =	11 CY				
511 46510 CLASS QC1 CO	NCRETE, FOO	TING Outlet			
Footing thickness =	1.50 ft.	1.50 ft.			
Depth of cutoff wall below bottom of footing =	2.50 ft.	2.50 ft.			
Plan area =	101 76 HAD	177 02 ft02			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	191.76 ft^2	177.03 ft^2			
Cutoff wall area =	49.93 ft^2	44.82 ft^2			
Volume =	412.47 ft^3	377.60 ft^3			
Avorage width of closure was a	2 42 #				
Average width of closure pour =					
Thickness of closure pour =					
Length of closure pour =					
Number of locations =	2				
Volume =	67.67 ft^3				
				7	
Total Quantity =	32 CY				
512 10100 SEALING OF CO	NCRETE SUR	FACES (EPOXY	'-URETHANE)		
	<u>Wall #1</u>	Wall #2	Wall #3	Wall #4	
Wall thickness =	1.00 ft.	1.00 ft.	1.00 ft.	1.00 ft.	
Wall area =	26.36 ft^2	44.13 ft^2	18.51 ft^2	44.16 ft^2	
Wall length across top =	7.88 ft.	12.29 ft.	6.00 ft.	12.26 ft.	
Top of wall area =	7.88 ft^2	12.29 ft^2	6.00 ft^2	12.26 ft^2	
Length behind wall =	0.50 ft.	0.50 ft.	0.50 ft.	0.50 ft.	
Behind wall area =	3.94 ft^2	6.15 ft^2	3.00 ft^2	6.13 ft^2	
Top of wall elevation at end =	1,006.51	1,006.17	1,005.77	1,006.10	
Ground elevation at end =	1,006.00	1,005.67	1,005.27	1,005.60	
End area =	0.51 ft^2	0.50 ft^2	0.50 ft^2	0.50 ft^2	
Plan area of corner =	0.00 ft^2	0.58 ft^2	0.00 ft^2	0.55 ft^2	
Total wingwall area =	38.69 ft^2	63.65 ft^2	28.01 ft^2	63.60 ft^2	
	lnlo4	Outlet			
F1	Inlet	Outlet			
Headwall height =	1.50 ft.	1.50 ft.			
Headwall thickness =	1.00 ft.	1.00 ft.			
Headwall length =	14.00 ft.	14.00 ft.			
Height behind headwall =	0.50 ft.	0.50 ft.			
Headwall area =	21.00 ft^2	21.00 ft^2			
Top of headwall area =	14.00 ft^2	14.00 ft^2			
Behind headwall area =	7.00 ft^2	7.00 ft^2			
Total headwall area =	42.00 ft^2	42.00 ft^2			
<u>Inside culvert</u>					
Rise =	4.00 ft.				
Span =	12.00 ft.				
Distance into culvert =	2.00 ft.				
Area of culvert face =	32.00 ft^2				
Total inside area =	144.00 ft^2				
Total area =	421.95 ft^2				
Total Quantity =	17 CV				

LOG-273-0296 SFN: 4602359 Designer: <u>AMR</u> Date: <u>\$/15/19</u>
Checker: <u>\$1k</u> Date: <u>\$/15/19</u>

512 33000 TYPE 2 WATERF	ROOFING				
Height of culvert legs = Length of culvert = Culvert length minus wingwall thickness = Top width of culvert = Amount of lap at leg and top corner = Amount of lap at wall corner = Total area =	76.12 ft. 74.12 ft. 14.00 ft. 1.00 ft. 1.00 ft.				
Total Quantity =	234 SY				
516 13600 1" PREFORMED	EXPANSION J	OINT FILLER			
Height of wall = Thickness of wall = Area =	Wall #1 7.50 ft. 1.00 ft. 7.50 ft^2	Wall #2 7.50 ft. 1.00 ft. 7.50 ft^2	Wall #3 7.50 ft. 1.00 ft. 7.50 ft^2	Wall #4 7.50 ft. 1.00 ft. 7.50 ft^2	
Total Quantity =	30 SF				
518 21200 POROUS BACKF	ILL WITH GEC	TEXTILE FABR	RIC		
Area behind walls = Thickness =	<u>Wall #1</u> 18.22 ft^2	<u>Wall #2</u> 28.03 ft^2 2.0	<u>Wall #3</u> 11.85 ft^2 0 ft.	Wall #4 27.00 ft^2	
Corner area = Height = Volume =	0.00 ft^2 4.39 ft. 36.44 ft^3	0.58 ft^2 4.41 ft. 58.62 ft^3	0.00 ft^2 4.10 ft. 23.70 ft^3	0.55 ft^2 4.22 ft. 56.32 ft^3	
Total Quantity =	7 CY				
611 95601 12' x 4' CONDUIT	TYPE A, 706.	05, AS PER PL	AN (2 FT COVE	ER)	
Total Quantity =	77 FT				

LOG-273-0296 SFN: 4602359 Designer: <u>AMR</u> Date: <u>\$/15/19</u>
Checker: <u>\$712</u> Date: <u>\$/15/19</u>