

**GENERAL NOTES:**

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Layout of slope protection system may be varied to suit ground conditions in the field as directed by the engineer.
3. The embankment configuration shown shall be the minimum embankment that must be placed and compacted prior to the construction of the abutments.
4. Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
5. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
6. Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.

**DESIGN SCOUR TABLE**

	N. ABUT.	S. ABUT.
Q100	414.87	414.64
Q500	414.87	414.64

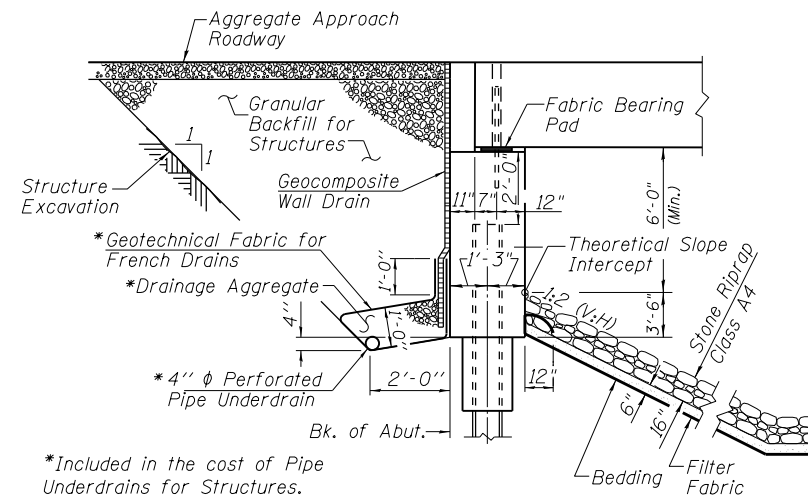
**WATERWAY INFORMATION**

Exist. Overtopping Elev. = 424.73 @ Sta. 1+56.95

Drainage Area = 2.37 Sq. Mi. Prop. Overtopping Elev. = 425.59 @ Sta. 52+09.16

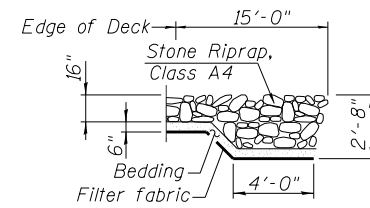
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10	1080	192.11	289.56	421.83	0.00	0.00	421.83	421.83	
Design	30	1618	245.41	352.36	423.40	0.15	0.00	423.55	423.40
	50	1810	261.21	368.76	423.81	0.25	0.00	424.06	423.81
Base	100	2140	272.39	391.56	424.38	0.46	0.00	424.84	424.38
Overtop Exist.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overtop Prop.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max. Calc.	500	3000	272.39	405.85	425.30	1.24	0.00	426.54	425.30

10 Yr. Velocity through Exist. Bridge = 5.82 ft/s  
 10 Yr. Velocity through Prop. Bridge = 3.82 ft/s



\*Included in the cost of Pipe Underdrains for Structures.

**SECTION THRU ABUTMENT**



**SECTION A-A**

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		365	365
Filter Fabric	Sq. Yd.		365	365
Hot-Mix Asphalt Surface Course, Mix "C", N50	Ton	12		12
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yd.		185	185
Concrete Structures	Cu. Yd.		68.2	68.2
Concrete Superstructure	Cu. Yd.	7.0		7.0
Concrete Encasement	Cu. Yd.		4.2	4.2
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	777		777
Reinforcement Bars, Epoxy Coated	Pound	190	8800	8990
Steel Railing, Type T1	Foot	96		96
Furnishing Steel Piles, HP 12x63	Foot		277	277
Driving Piles	Foot		277	277
Test Pile Steel HP 12x63	Each		1	1
Name Plates	Each	1		1
Waterproofing Membrane System	Sq. Yd.	77		77
Geocomposite Wall Drain	Sq. Yd.		51.5	51.5
Granular Backfill for Structures	Cu. Yd.		136	136
Pipe Underdrains for Structures 4"	Foot		70	70
Portland Cement Mortar Fairing Course	Foot		216	216