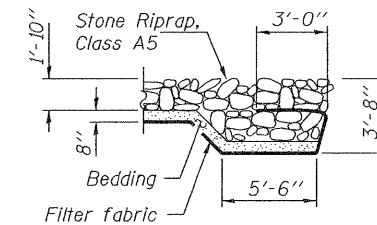


TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		95	95
Stone Riprap, Class A5	Sq. Yd.		1465	1465
Filter Fabric	Sq. Yd.		1465	1465
Removal of Existing Structures No. 2	Each	1		1
Structure Excavation	Cu. Yd.		250	250
Floor Drains	Each	10		10
Concrete Structures	Cu. Yd.		165.0	165.0
Concrete Superstructure	Cu. Yd.	297.0		297.0
Bridge Deck Grooving	Sq. Yd.	724.0		724.0
Concrete Encasement	Cu. Yd.		9.1	9.1
Protective Coat	Sq. Yd.	907		907
Furnishing and Erecting Structural Steel	L. Sum	0.5		0.5
Stud Shear Connectors	Each	2772		2772
Reinforcement Bars, Epoxy Coated	Pound	73950	15950	89900
Bar Splicers	Each	707	92	799
Furnishing Steel Piles HP12x53	Foot		1193	1193
Driving Piles	Foot		1193	1193
Test Pile Steel HP12x53	Each		4	4
Temporary Sheet Piling	Sq. Ft.		339	339
Name Plates	Each	1		1
Anchor Bolts, 1" ϕ	Each		28	28
Anchor Bolts, 1/2" ϕ	Each		28	28
Geocomposite Wall Drain	Sq. Yd.		58	58
Pipe Underdrains for Structures, 4"	Foot		139	139
Underwater Structure Excavation Protection, Location 1	Each		1	1
Underwater Structure Excavation Protection, Location 2	Each		1	1
Mechanical Splicers	Each		84	84

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 3. Bolts 7/8" ϕ , holes 15/16" ϕ , unless otherwise noted.
 Calculated weight of Structural Steel = 93120 lbs. (M 270 Gr. 50W).
 All structural steel shall be AASHTO M 270 Grade 50W. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
 No field welding is permitted except as specified in the contract documents.
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
 Reinforcement bars designated (E) shall be epoxy coated.
 Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
 The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
 Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.
 Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
 Slipforming of parapets is not allowed.



SECTION A-A

WATERWAY INFORMATION

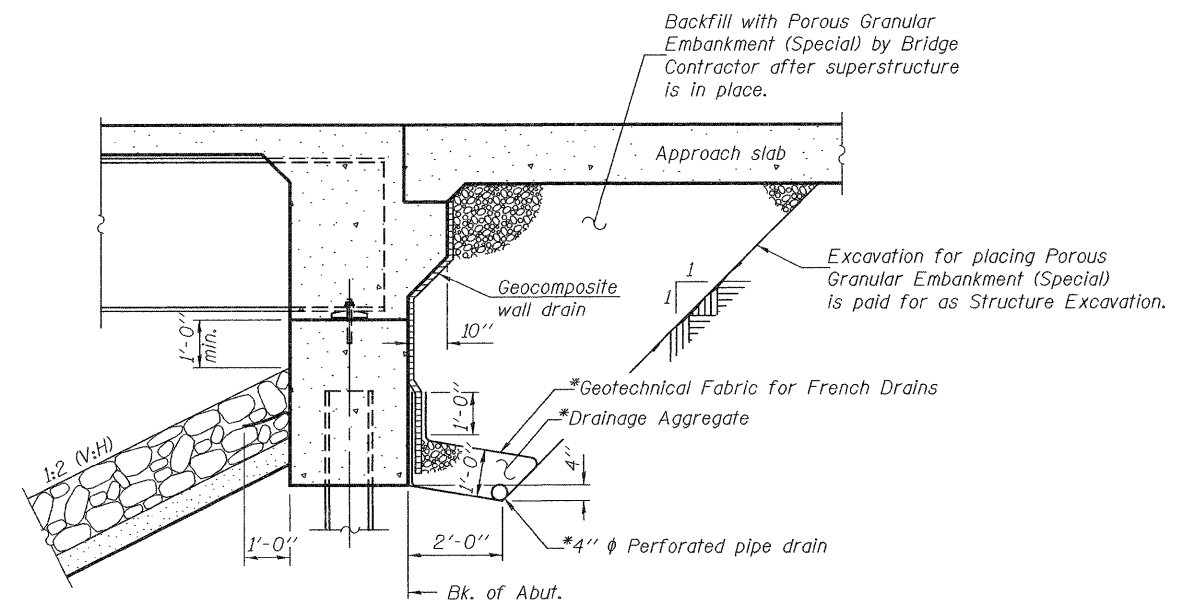
Flood	Freq. Yr.	Structure Number	Q - C.F.S.		Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	028-0015 (E)	4500	4195	665	720	388.3	0.8	0.7	389.1	389.0
		073-0038 (P)									
		*Total	11130	1661.0	1768.0						
Design	50	028-0015 (E)	6550	6630	785	840	389.5	1.5	1.2	391.0	390.7
		073-0038 (P)									
		*Total	17010	1968.0	2076.0						
Base	100	028-0015 (E)	7315	7380	840	895	390.0	1.9	1.5	391.9	391.5
		073-0038 (P)									
		*Total	19540	2106.0	2211.0						
Max. Calc.	500	028-0015 (E)	9380	9265	955	1015	391.1	2.8	2.3	393.9	393.4
		073-0038 (P)									
		*Total	26040	2398.0	2511.0						

10 year velocity through existing bridge = 6.8 ft/s
 10 year velocity through proposed bridge = 6.1 ft/s

*Three additional structures (SN 073-0013 (E), SN 073-2000 (E), and SN 028-2005 (E) contribute to the flow conveyance of this drainage area.

DESIGN SCOUR ELEVATION TABLE

Design scour elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	391.3	364.0	364.0	391.3



SECTION THRU INTEGRAL ABUTMENT

*Included in the cost of Pipe Underdrains for Structures.

Note: All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Std. Specs. & Highway Standard 601101).

*PERRY/FRANKLIN

DESIGNED - Jessica C. Forrest	EXAMINED - Thomas J. Domagalala	DATE - 5/10/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		GENERAL DATA STRUCTURE NO. 073-0038		F.A.P. RTE. 869	SECTION 6B-2	COUNTY *	TOTAL SHEETS 299	SHEET NO. 132
CHECKED - Nicholas R. Barnett	PASSED - [Signature]				SHEET NO. 2 OF 26 SHEETS		CONTRACT NO. 98797		ILLINOIS FED. AID PROJECT		