GENERAL NOTES

Fasteners shall be AASHTO M164 Type 3. Bolts $^{3}/_{4}$'' ϕ, holes $^{15}/_{16}$'' ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 197160 lbs.

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.

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.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

WATERWAY INFORMATION

Drainage Area = 201.2 mi.^{2}

Existing Low Grade Elev. 396.29 @ Sta. 238+00
Proposed Low Grade Elev. 396.39 @ Sta. 238+00

Flood	Freq. Yr.	Structure Number	Q - C.F.S. Exist.	Q - C.F.S. Prop.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	073-0013 (E) 073-0036 (P)	6015	6365	900	952	388.3	0.8	0.7	389.1	389.0
		**Total	11130		1661.0	1768.0					
Design	50	073-0013 (E) 073-0036 (P)	9090	9155	1020	1073	389.5	1.5	1.2	391.0	390.7
		**Total	17010		1968.0	2076.0					
Base	100	073-0013 (E) 073-0036 (P)	10490	10615	1075	1125	390.0	1.9	1.5	391.9	391.5
		**Total	19540		2106.0	2211.0					
Max. Calc.	500	073-0013 (E) 073-0036 (P)	13860	14250	1190	1243	391.1	2.8	2.3	393.9	393.4
		**Total	26040		2398.0	2511.0					

10 year velocity through existing bridge = 6.7 ft/s
10 year velocity through proposed bridge = 6.8 ft/s

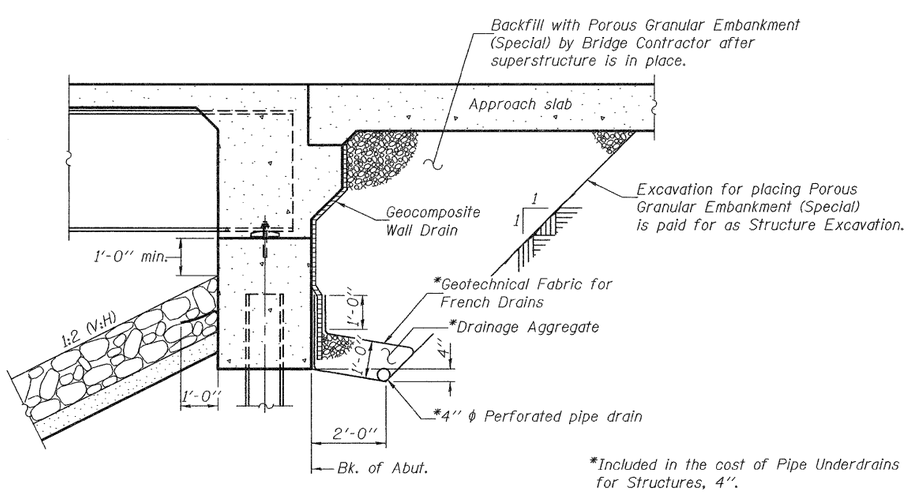
**Three additional structures (SN 028-0015 (E), SN 073-2000 (E), and SN 028-2005 (E) contribute to the flow conveyance of this drainage area.

DESIGN SCOUR ELEVATION TABLE

Design scour elevation (ft.)	W. Abut.	E. Abut.
	385.35	385.35

TOTAL BILL OF MATERIAL

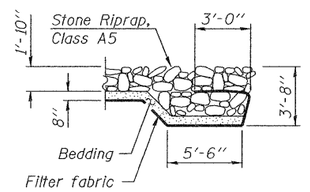
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		226.2	226.2
Stone Riprap, Class A5	Sq. Yd.		1024	1024
Filter Fabric	Sq. Yd.		1024	1024
Removal of Existing Structures No. 1	Each			1
Structure Excavation	Cu. Yd.		226	226
Floor Drains	Each	14		14
Concrete Structures	Cu. Yd.		64.8	64.8
Concrete Superstructure	Cu. Yd.	301		301
Bridge Deck Grooving	Sq. Yd.	668		668
Concrete Encasement	Cu. Yd.		6.6	6.6
Protective Coat	Sq. Yd.	834		834
Furnishing and Erecting Structural Steel	L. Sum	0.5		0.5
Stud Shear Connectors	Each	1242		1242
Reinforcement Bars, Epoxy Coated	Pound	67650	7220	74870
Bar Splicers	Each	679	22	701
Steel Railing (Temporary)	Foot	188		188
Furnishing Steel Piles HP14x73	Foot		1044	1044
Driving Piles	Foot		1044	1044
Temporary Sheet Piling	Sq. Ft.		619	619
Name Plates	Each	1		1
Anchor Bolt 1'' ϕ	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		106	106
Pipe Underdrains for Structures, 4''	Foot		160	160
Slopewall Removal	Sq. Yd.		324	324



*Included in the cost of Pipe Underdrains for Structures, 4''.

SECTION THRU INTEGRAL ABUTMENT

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).



SECTION A-A

DESIGNED - Michael D. Rolape	EXAMINED	Thomas J. Domagalski ENGINEER OF BRIDGE DESIGN	DATE - 5/10/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL DATA STRUCTURE NO. 073-0036	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - Jessica C. Forrest						869	1B-2	PERRY	299	106
DRAWN - h.t. duong	PASSED	J. Carl Piercy ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 2 OF 24 SHEETS			CONTRACT NO. 98797		
CHECKED - MDR/JCF								ILLINOIS FED. AID PROJECT		