GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$'' ϕ, holes $\frac{15}{16}$'' ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 720040 lbs (AASHTO M270 Grade 50).
36830 lbs (AASHTO M270 Grade 36).

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ 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.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all steel surfaces shall be gray, Munsell No. 5B 7/1.

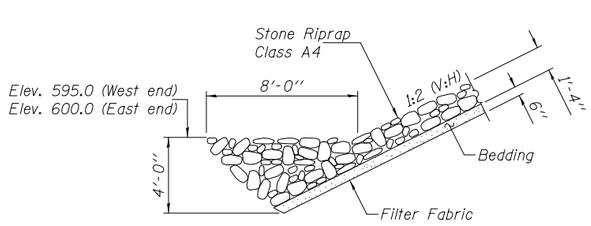
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

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

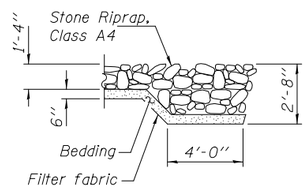
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Granular Backfill for Structures	Cu. Yd.		264	264
Stone Riprap, Class A4	Sq. Yd.		2411	2411
Filter Fabric	Sq. Yd.		2411	2411
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		80	80
Concrete Structures	Cu. Yd.		150.1	150.1
Concrete Superstructure	Cu. Yd.	449.4		449.4
Bridge Deck Grooving	Sq. Yd.	1346		1346
Concrete Encasement	Cu. Yd.		6.6	6.6
Protective Coat	Sq. Yd.	1753		1753
Concrete Wearing Surface, 5''	Sq. Yd.	229.8		229.8
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3006		3006
Reinforcement Bars	Pound		9340	9340
Reinforcement Bars, Epoxy Coated	Pound	104760	21330	126090
Bar Splicers	Each		180	180
Furnishing Steel Piles HP14x73	Foot		325	325
Driving Piles	Foot		325	325
Test Pile Steel HP14x73	Each		2	2
Pile Shoes	Each		12	12
Name Plates	Each	1		1
Drilled Shaft in Soil	Cu. Yd.		18.0	18.0
Drilled Shaft in Rock	Cu. Yd.		22.3	22.3
Preformed Joint Strip Seal	Foot	78.0		78.0
Anchor Bolts 1''	Each		24	24
Anchor Bolts $1\frac{1}{4}$''	Each		12	12
Geocomposite Wall Drain	Sq. Yd.		118	118
Pipe Underdrains for Structures 4''	Foot		174	174
Drainage Scuppers, DS-11	Each	4		4
Precast Bridge Approach Slab	Sq. Ft.	2030		2030
Mechanical Splicers	Each		72	72

INDEX OF SHEETS



SECTION A-A



SECTION B-B

DESIGN SCOUR ELEVATION TABLE

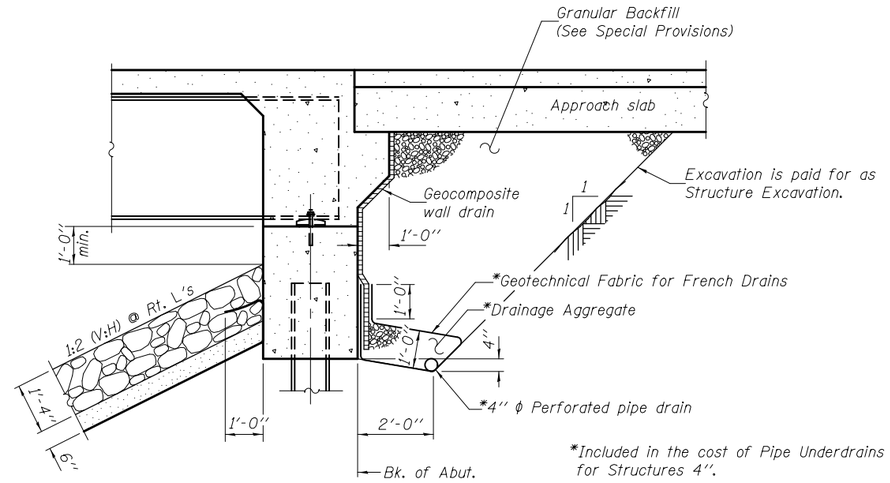
Design scour elevation (ft.)	W. Abut.	Pier	E. Abut.
	618.77	587.50	615.58

WATERWAY INFORMATION

Drainage Area = 538.0 mi.²
Existing Low Grade Elev. 621.2 @ Sta. 716+50
Proposed Low Grade Elev. 624.4 @ Sta. 717+50

Flood	Freq. Yr.	Q C.F.S.	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	16596	3573	4424	616.0	0.1	0.0	616.1	616.0
Design	50	16767	4198	5361	619.4	0.2	0.1	619.6	619.5
Base	100	18978	4300	5644	620.7	0.4	0.2	621.1	620.9
Overtopping	100	18978	4300	——	620.7	0.4	——	621.1	——
Max. Calc.	500	24470	4310	5796	623.4	0.5	0.3	623.9	623.7

10 year velocity through existing bridge = 4.6 ft/s
10 year velocity through proposed bridge = 3.8 ft/s



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

SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. L's)

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 Standard Specifications and Highway Standard 601101).

DESIGNED - Justin T. Belue	EXAMINED	DATE - OCTOBER 16, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL DATA STRUCTURE NO. 015-0076	F.A.P. RTE. 749 | SECTION (122BR)B-1 | COUNTY COLES | TOTAL SHEETS 60 | SHEET NO. 19
CHECKED - David H. Richter					CONTRACT NO. 74350
DRAWN - h.t. duong	PASSED	REVISED		SHEET NO. 2 OF 31 SHEETS	ILLINOIS FED. AID PROJECT
CHECKED - JTB/DHR	ACTING ENGINEER OF BRIDGE DESIGN ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			