

**GENERAL NOTES**

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts  $\frac{7}{8}$  in.  $\phi$ , holes  $\frac{15}{16}$  in.  $\phi$ , unless otherwise noted.
- Calculated weight of Structural Steel (M270, Grade 50) = 106910 lbs.  
Calculated weight of Structural Steel (M270, Grade 36) = 9,880 lbs.
- 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. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- 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 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 interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".
- 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.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
- Slip forming of the parapets is not allowed.
- The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.
- If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on the existing beams or new deck, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing structures.
- Current Ratings on file for Existing Structure  
Inventory: HS 12  
Operating: HS 20  
Live Load Restrictions : No

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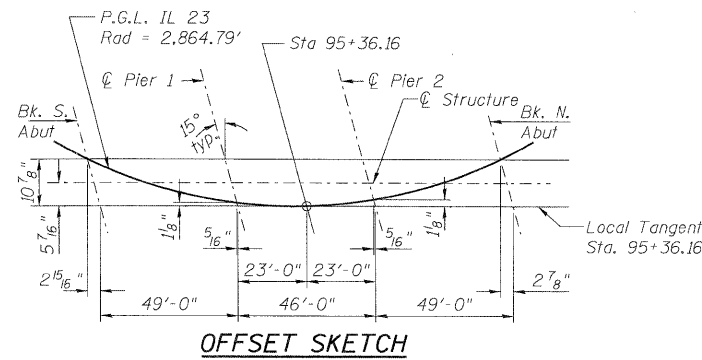
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	APPR. SLAB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		1414		1414
Filter Fabric	Sq. Yd.		1414		1414
Removal of Existing Structures	Each	1			1
Structure Excavation	Cu. Yd.		500		500
Concrete Structures	Cu. Yd.		183.4	29.0	212.4
Concrete Superstructure	Cu. Yd.	237.0		140.9	377.9
Bridge Deck Grooving	Sq. Yd.	720		300	1020
Concrete Encasement	Cu. Yd.		11.3		11.3
Protective Coat	Sq. Yd.	845		332	1177
Furnishing and Erecting Structural Steel	L. Sum	1			1
Stud Shear Connectors	Each	3927			3927
Reinforcement Bars, Epoxy Coated	Pound	57960	19230	37530	114720
Bar Splicers	Each	577	92	222	891
Furnishing Steel Piles HP12x53	Foot		1130		1130
Driving Piles	Foot		1130		1130
Test Pile Steel HP12x53	Each		4		4
Pile Shoes	Each		32		32
Name Plates	Each	1			1
Anchor Bolts, 1"	Each		56		56
Geocomposite Wall Drain	Sq. Yd.		72		72
Porous Granular Embankment, Special	Cu. Yd.		164		164
Underwater Structure Excavation Protection - Location 1	Each		1		1
Underwater Structure Excavation Protection - Location 2	Each		1		1
Temporary Sheet Piling	Sq. Ft.		1164		1164
Pipe Underdrains for Structures 4"	Foot		160		160

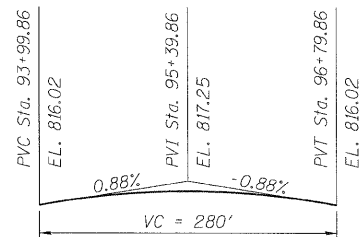
**WATERWAY INFORMATION**

Drainage Area = 83.2 mi<sup>2</sup>    Exist. Low Grade Elev. = 813.26 ft.    @ Sta. 94+00  
 Prop. Low Grade Elev. = 813.42 ft.    @ Sta. 89+50

Flood Yr.	Freq.	Q	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10	4028	762.8	848.0	809.72	1.00	0.99	810.72	810.71	
Design	50	5174	819.2	919.3	810.28	1.26	1.16	811.54	811.44
Base	100	5394	828.3	930.9	810.37	1.31	1.20	811.68	811.57
Overtopping	>500								
Max. Calc.	500	5927	852.4	961.9	810.61	1.48	1.28	812.09	811.89



**OFFSET SKETCH**



**PROFILE GRADE**  
(Along  $\phi$  Roadway)

**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevation (Ft.)	S. Abut	Pier 1	Pier 2	N. Abut
	808.95	782.71	782.71	808.98