

**GENERAL NOTES**

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts  $\frac{7}{8}$  in.  $\phi$ , holes  $\frac{9}{16}$  in.  $\phi$ , unless otherwise noted.
- Calculated weight of Grade 36 Structural Steel = 16,930 lbs  
Calculated weight of Grade 50 Structural Steel = 262,520 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 their 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 Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. All final surfaces of the beams shall be painted with light grey (Munsell color Standard 10Y 7/1) except the exterior surfaces of the exterior beams which shall be painted with interstate green (Munsell color Standard 7.5G 4/8). See Special Provision for "Cleaning and Painting New Metal Structures".
- The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations of substructures specified or approved by the Engineer before ordering the remainder of piles.
- Sloped wall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
- The Contractor is advised that the existing PPC I beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the conditions of the beams when developing construction procedures for removal and replacement of the Superstructure.
- If the Contractor's procedures for existing PPC I beam removal or replacement of new beams involves the placement of heavy equipment on the existing deck, a detailed procedure shall be provided which includes calculations, sealed by an Illinois licensed Structural Engineer, verifying the adequacy of the existing structure, for the proposed loads. This cost shall be included in the contract unit cost, each, for Removal of Existing Structure.
- In lieu of the hammer selection criteria and use of the FHWA modified gates formula specified in Section 512 of the Standard Specifications, the Contractor shall conduct a wave equation analysis to establish the driving criteria at all pile foundations which specify a Nominal required Bearing above 600 kips. The analysis and calculations shall be submitted to the Engineer for approval.
- Slip forming of the parapets will not be allowed.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

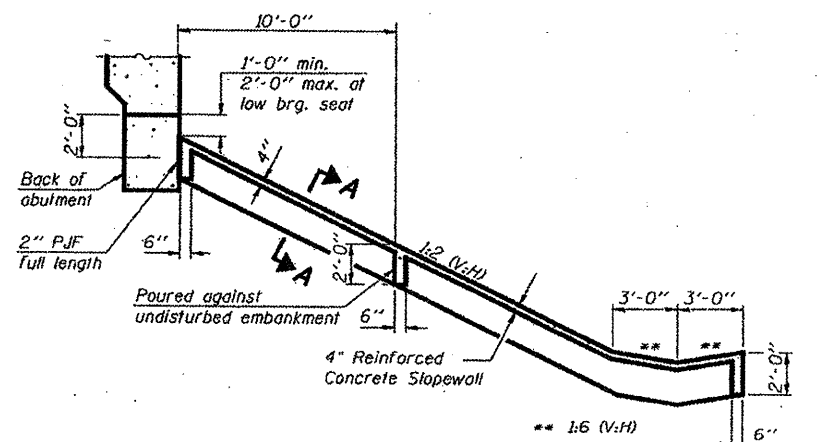
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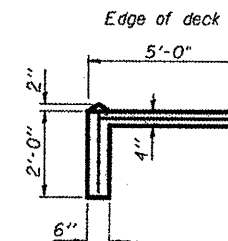
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	--	122	122
Removal of Existing Structures	Each	1	--	1
Structure Excavation	Cu. Yd.	--	208	208
Protective Coat	Sq. Yd.	1127	--	1127
Bridge Deck Grooving	Sq. Yd.	810	--	810
Furnishing & Erecting Structural Steel	L. Sum	1	--	1
Furnishing Steel Piles HP12x53	Foot	--	780	780
Furnishing Steel Piles HP14x102	Foot	--	574	574
Driving Piles	Foot	--	1354	1354
Reinforcement Bars, Epoxy Coated	Pounds	76,865	13,785	90,650
Name Plates	Each	--	1	1
Stud Shear Connectors	Each	1872	--	1872
Bar Splicers	Each	62	--	62
Drainage Scuppers, DS-II	Each	4	--	4
Slope Wall 4"	Sq. Yd.	--	424	424
Concrete Structures	Cu. Yd.	--	111.9	111.9
Concrete Superstructure	Cu. Yd.	342.4	--	342.4
Pipe Underdrains for Structures 4"	Foot	--	119	119
Protective Shield	Sq. Yd.	430	--	430
Concrete Encasement	Cu. Yd.	--	8.6	8.6
Anchor Bolts, 1"	Each	--	36	36
Geocomposite Wall Drain	Sq. Yd.	--	38	38
Test Pile Steel HP12x53	Each	--	2	2
Test Pile Steel HP14x102	Each	--	1	1
Braced Excavation	Cu. Yd.	--	x	x
Mechanical Splicers	Each	--	36	36
Permanent Bench Marks	Each	1	--	1

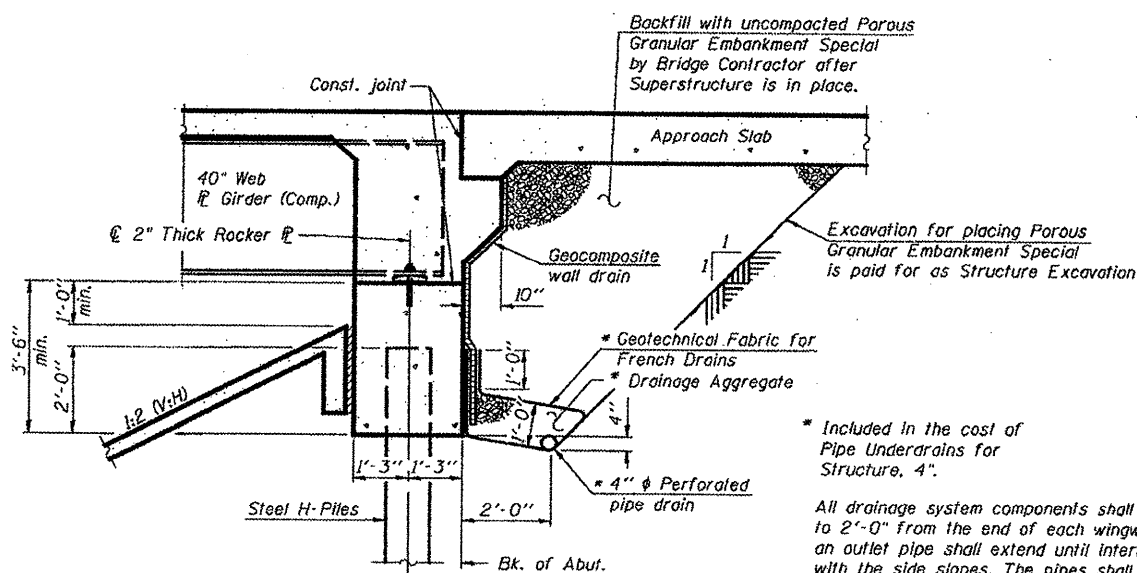
\* Protective Shield required only for spans 2 & 3 of the existing structure.



**SECTION THRU  
CONCRETE SLOPEWALL**



**SECTION A-A**



**SECTION THRU INTEGRAL ABUTMENT**

\* Included in the cost of Pipe Underdrains for Structure, 4".  
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 Specification and Highway Standard 601.01.)

**GENERAL DATA  
STRUCTURE NO. 010-0285**

DESIGNED CJC / MEB
CHECKED JSP
DRAWN UJ
CHECKED MEB



SHEET NO. 2	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	14
20 SHEETS	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					