

**GENERAL NOTES**

Fasteners shall be high strength bolts. Bolts 7/8" φ, open holes 15/16" φ, unless otherwise noted.

Calculated weight of structural steel = 236,660 lbs (M270 Grade 36)

Reinforcement Bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.

Prior to pouring the new concrete deck, all loose rust, loose mill scale and other loose potentially detrimental foreign material shall be removed from the surfaces of the girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

All existing construction accessories welded to the top flange over the piers between the quarter points of the girders shall be removed. The remaining weld shall be ground smooth and inspected for cracks using magnetic particle testing. Any cracks that can not be removed by grinding approximately 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of this work will be paid for according to Article 109.04.

Field welding of construction accessories will not be permitted to girders.

The Structural Steel Bearing Plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8". Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two 1/8" adjusting shims shall be provided for each bearing and placed as detailed.

The existing structural steel coating contains lead. The Contractor should 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 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 girders shall be Blue, Munsell No. 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures."

The Contractor shall repair any damage to the paint system of the existing girders occurring during construction. The cost of this repair shall be included with "Furnishing and Erecting Structural Steel."

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs and all splice plate material except fill plates.

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

The Contractor shall drive one steel HP 10 x 42 test pile in a permanent location at each abutment as directed by the Engineer before ordering the remainder of the piles.

Anchor bolts shall be set before bolting diaphragms over supports.

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

All construction joints shall be bonded.

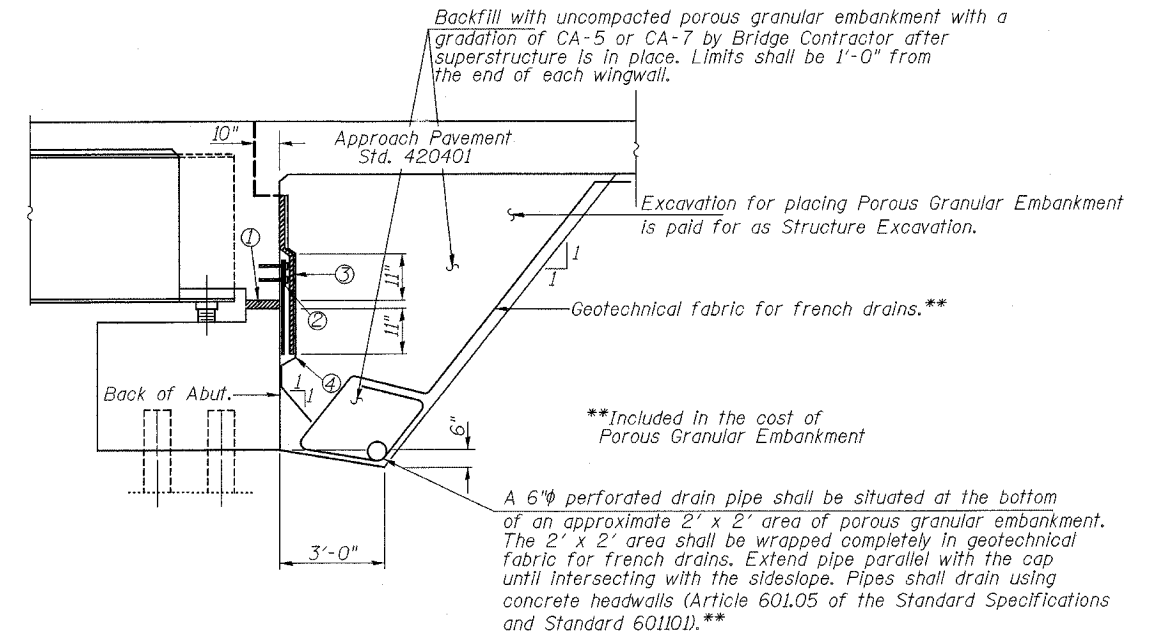
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Concrete Deck No. 2	Each	1		1
Porous Granular Embankment	Cu Yd		568	568
Concrete Removal	Cu Yd		77.0	77.0
Structure Excavation	Cu Yd		366	366
Concrete Superstructure	Cu Yd	676.2		676.2
Concrete Structures	Cu Yd		236.3	236.3
Elastomeric Bearing Assembly, Type I	Each			20
Elastomeric Bearing Assembly, Type II	Each			10
Reinforcement Bars, Epoxy Coated	Pound	179,860	25,740	205,600
Reinforcement Bars	Pound		7160	7160
Name Plates	Each	1		1
Furnishing and Erecting Structural Steel	L. Sum	.48		.48
Stud Shear Connectors	Each	2460		2460
Floor Drains	Each	12		12
Drainage Scupper, DS-12	Each	3		3
Bridge Deck Grooving	Sq. Yd.	2213		2213
Bar Splicers	Each	1255	388	1643
Furnishing Steel Piles HP 10x42	Foot		448	448
Driving Steel Piles	Foot		448	448
Test Piles Steel HP 10x42	Each		2	2
Drilled Shaft in Rock 30"	Foot		81	81
Drilled Shaft in Soil 36"	Foot		119	119
Underwater Structure Excavation, Location 3	Each		1	1
Underwater Structure Excavation, Location 4	Each		1	1
Stone RipRap, Class A4	Sq. Yd.			2295
Jacking and Cribbing, Location No. 2	L. Sum	1		1
Temporary Sheet Piling	Sq. Ft.			900
Filter Fabric For Use With RipRap	Sq. Yd.			2295
Slope Wall Removal	Sq. Yd.			642
Protective Coat	Sq. Yd.	2491		2491

\*Includes Removal and disposal of Existing Bearings.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. RTE. 774	107BY	EFFINGHAM	273	228
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT-				

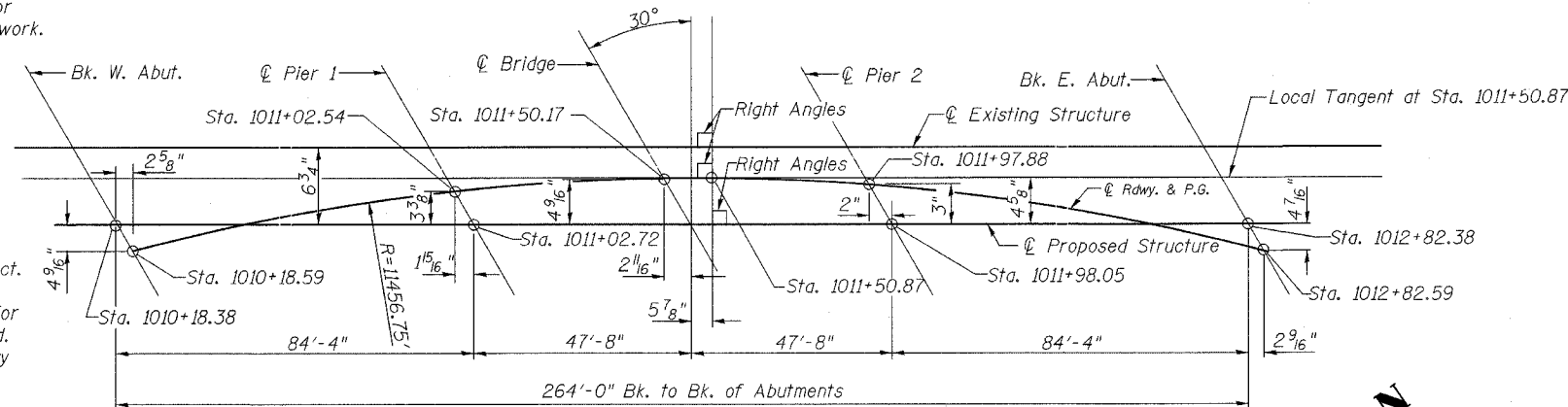
CONTRACT NO. 94827



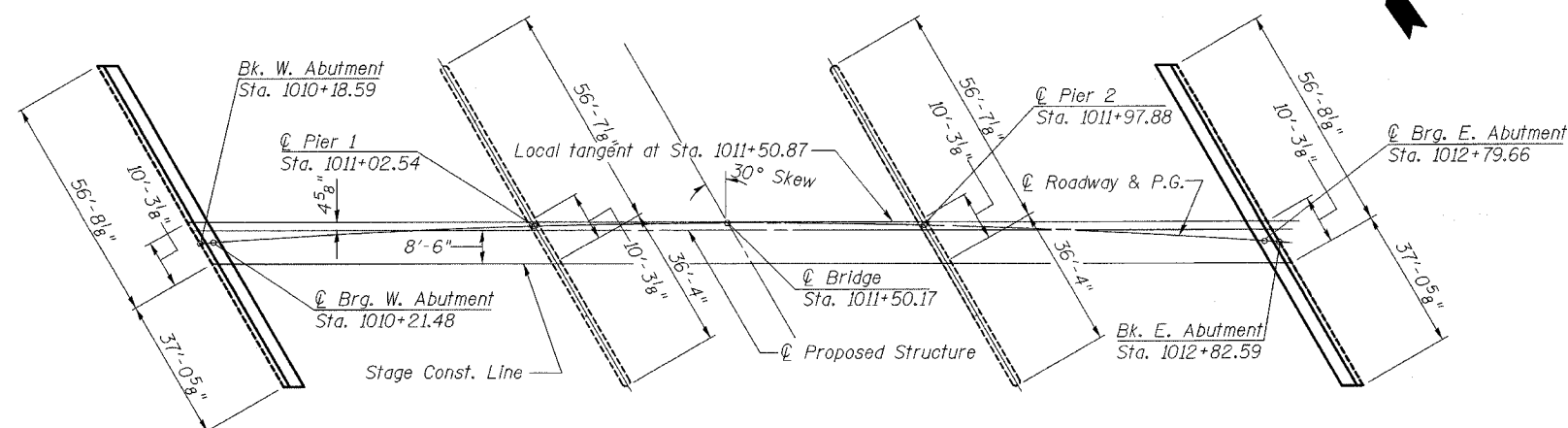
**SECTION THRU SEMI INTEGRAL ABUTMENTS**

(dimension at right Angles) (showing drain details)

- ① 2" Preformed Joint Filler (Section 1051 of the Standard Specifications) bonded to abutment cap with approved adhesive (full width of cap).
  - ② Fabric Reinforced Elastomeric Mat (See Special Provisions) Fabric mat shall be 24" wide and attached full width to the abutment cap with a 3/8" x 5" steel plate and 1/2" φ studs with nuts and washers at 12" cts.
  - ③ 2" Preformed Joint Filler (Section 1051 of the Standard Specifications) bonded to superstructure (full width of cap).
  - ④ Geocomposite Wall Drain (Section 591 of the Standard Specifications-full width of cap).
- Items ① ② ③ & ④ shall be included in the cost of Concrete Superstructure.



**OFFSET SKETCH**



**FOOTING LAYOUT**

SHEET TITLE	
GENERAL NOTES AND TOTAL BILL OF MATERIALS	
PROJECT	PROJECT NO.
IL RTE. 32/33 OVER LITTLE WABASH RIVER	02017
F.A.P. RTE. 774 SECTION 107BY	SCALE
EFFINGHAM COUNTY	DATE
STATION 1011+50.17	DRAWN BY
STRUCTURE NO. 025-0078	TFG
	CHECKED BY
	GJB/MCB
	DRAWING NO.
<b>COOMBE-BLOXDORF P.C.</b>	
Engineers/Land Surveyors	
Springfield, Illinois	
Design Firm License No. 184-002703	
2	
OF 29 SHTS	

FILE:BB076

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