

**STONE RIPRAP ANCHOR DETAIL**

**STATION 1153+05.72**  
**BUILT BY**  
**STATE OF ILLINOIS**  
**F.A.P. RT. 315 SEC. 34-4B-1**  
**LOADING HS20**  
**STR. NO. 034-0508**  
**NAME PLATE**  
 (See Std. 515001)

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**GENERAL NOTES**

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

All structural steel shall be AASHTO M 270 Grade 50W.

The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.

Calculated weight of Structural Steel = 492,360 lbs

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 wide flange beams and all splice plate material except fill plates.

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

The contractor shall drive one steel HP 12x53 test pile in a permanent location at the east abutment, and two 14"φ metal shell test piles in permanent locations, one at pier#2 and one at pier#4, as directed by the Engineer before ordering the remainder of piles.

Fasteners shall be high strength bolts (AASHTO M 164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or 2 in painted areas). Bolts 7/8"φ, open holes 15/16"φ, unless otherwise noted.

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

Anchor bolts shall be set before bolting diaphragms over supports.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. 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.

Bridge Seat Sealer shall be applied to the seat area of the abutments.

AASHTO M 270 Grade 50W structural steel shall only be painted, for a distance of three times the depth of the beams or girders (but not exceeding 10 feet) each way from the deck joints. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".

All construction joints shall be bonded.

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

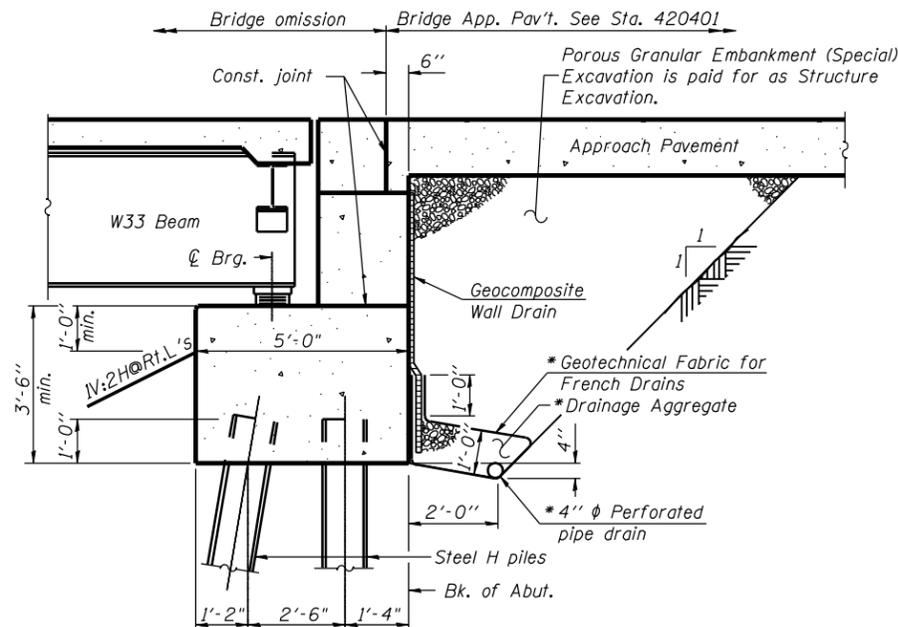
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Superstructure	CU YD	596.4	—	596.4
Concrete Structures	CU YD	—	425.6	425.6
Reinforcement Bars, Epoxy Coated	POUND	135,270	35,890	171,160
Furnishing and Erecting Structural Steel	L SUM	1	—	1
Neoprene Expansion Joint (4")	FOOT	44	—	44
Neoprene Expansion Joint (2")	FOOT	44	—	44
Porous Granular Embankment (Special)	CU YD	—	110	110
Protective Coat	SQ YD	2,432	—	2,432
Bridge Deck Grooving	SQ YD	1,927	—	1,927
Stud Shear Connectors	EACH	7,504	—	7,504
Elastomeric Bearing Assembly, Type I	EACH	14	—	14
Elastomeric Bearing Assembly, Type II	EACH	21	—	21
Elastomeric Bearing Assembly, Type III	EACH	7	—	7
Structure Excavation	CU YD	—	711	711
Name Plates	EACH	1	—	1
Floor Drains	EACH	56	—	56
Stone Riprap, Class A5	TON	—	—	2,450
Filter Fabric	SQ YD	—	—	1,900
Furnishing Steel Piles HP 12x53	FOOT	—	1,772	1,772
Driving Steel Piles	FOOT	—	1,772	1,772
Test Pile Steel HP 12x53	EACH	—	1	1
Furnishing Metal Pile Shells 14"	FOOT	—	3,879	3,879
Driving and Filling Shells	FOOT	—	3,879	3,879
Test Pile Metal Shells	EACH	—	2	2
Bridge Seat Sealer	SQ FT	—	266	266
Bar Splicers	EACH	84	—	84
Concrete Encasement	CU YD	—	52.2	52.2
Underwater Structure Excavation Protection, Location 1	EACH	—	1	1
Underwater Structure Excavation Protection, Location 2	EACH	—	1	1
Pipe Underdrains for Structures, 4"	FOOT	—	—	104
Geocomposite Wall Drain	SQ YD	—	—	56

**GENERAL PLAN DETAILS**  
**US ROUTE 136 OVER**  
**LA MOINE RIVER**  
**FAP ROUTE 315 SECTION 34-4B-1**  
**HANCOCK COUNTY**  
**STATION 1153+07.72**  
**STR. NO. 034-0508 (WBL)**

HUTCHISON ENGINEERING, INC.  
 JACKSONVILLE, ILLINOIS

Date: January 31, 2006



\*Included in the cost of Pipe Underdrains for Structures.

**SECTION THRU PILE BENT ABUTMENT**

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

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 pipe shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)

DESIGNED	JOH
CHECKED	BRT
DRAWN	TC
CHECKED	JOH