

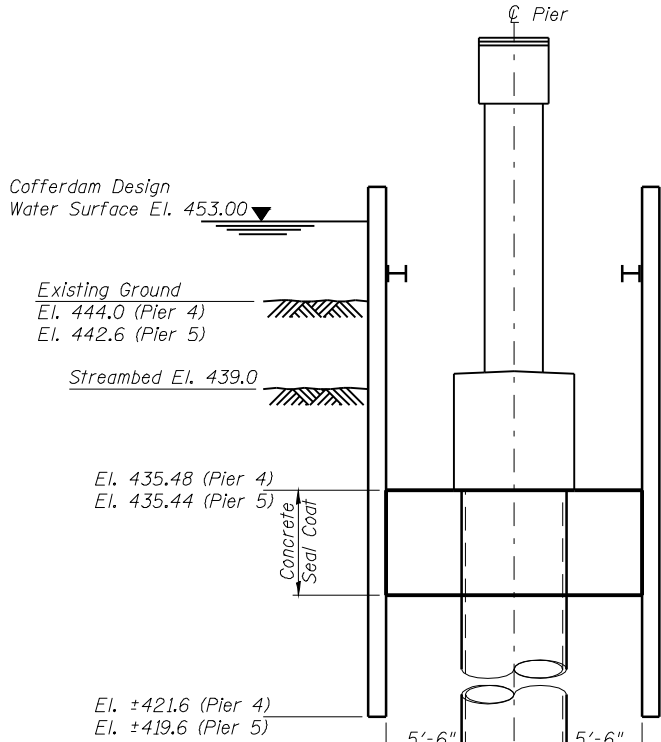
GENERAL NOTES

1. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and Type 3, in unpainted areas. Bolts 7/8" in. ϕ , with 15/16" ϕ holes unless otherwise noted.
2. Calculated weight of Structural Steel = 2,677,990 lbs.
3. All structural steel shall be AASHTO M 270 Grade 50W (except Strip Seal Expansion Joints shall be AASHTO M270 Grade 36).
4. No field welding is permitted except as specified in the contract documents.
5. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions
6. Reinforcement bars designated (E) shall be epoxy coated.
7. Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
8. Concrete Sealer shall be applied to the backwalls, seats, step areas, and front cap face of the North and South Abutments, and to the vertical pier cap faces (including ends), seat areas, and the vertical step faces of Piers 3 and 6.
9. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
10. Structural steel shall only be painted for a distance of 10 ft. 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".
11. All exposed structural steel of the bearings and the Finger Joints shall be cleaned and shop painted as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
12. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
13. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
14. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
15. 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.
16. The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR permit number as shown in the contract plans.
17. Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted for approval with the cofferdam design.
18. The debris deflection system attached to the existing bridge near Piers 2, 3 and 4 are to be considered part of the existing structure and its removal will not be paid for separately.
19. Slipforming of parapets is not allowed.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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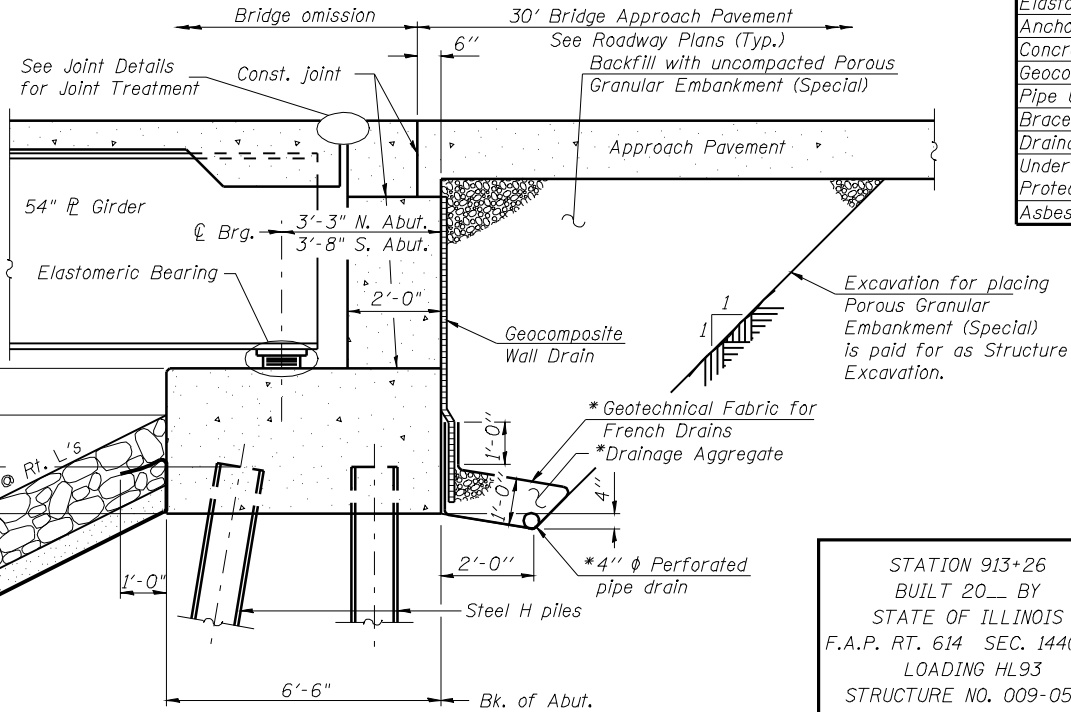
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A water surface elevation of 453.00 will be the basis for the cofferdam design. It is the Contractor's responsibility to provide a design and computations for the cofferdam, including sheet piling, wales and bracing, verification of seal coat shown, and all other required appurtenances, subject to the approval of the Engineer.
Plan dimensions of cofferdam: 11'-0" x 50'-0".

COFFERDAM DETAILS

(Piers 4 and 5)
Horiz. dim. @ Rt. L's



TYPICAL SECTION THRU ABUTMENTS

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

* Included in the cost of Pipe Underdrains for Structures.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP Rte 614	144(B-1)	Cass & Mason	351	138
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

Contract #72A76

SHEET NO. 2

86 SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	-	169	169
Stone Riprap, Class A5	Sq. Yd.	-	3273	3273
Filter Fabric	Sq. Yd.	-	3273	3273
Removal of Existing Structures No. 2	Each	-	-	1
Structure Excavation	Cu. Yd.	-	1043	1043
Cofferdam Excavation	Cu. Yd.	-	595	595
Cofferdam (Pier 4)	Each	-	1	1
Cofferdam (Pier 5)	Each	-	1	1
Floor Drains	Each	10	-	10
Concrete Structures	Cu. Yd.	-	1556.1	1556.1
Concrete Superstructure	Cu. Yd.	2264.1	-	2264.1
Bridge Deck Grooving	Sq. Yd.	6814	-	6814
Seal Coat Concrete	Cu. Yd.	-	243	243
Concrete Encasement	Cu. Yd.	-	36	36
Protective Coat	Sq. Yd.	8759	-	8759
Furnishing and Erecting Structural Steel	L. Sum	0.88	-	0.88
Stud Shear Connectors	Each	17064	-	17064
Reinforcement Bars	Pound	-	20150	20150
Reinforcement Bars, Epoxy Coated	Pound	569890	194030	763920
Bar Splicers	Each	-	82	82
Furnishing Metal Shell Piles 14" x 0.25"	Foot	-	85	85
Furnishing Steel Piles HP14x89	Foot	-	10560	10560
Driving Piles	Foot	-	10560	10560
Test Pile Steel HP14x89	Each	-	2	2
Pile Load Test	Each	-	1	1
Pile Shoes	Each	-	126	126
Name Plates	Each	1	-	1
Permanent Casing	Foot	-	432	432
Drilled Shaft in Soil	Cu. Yd.	-	372	372
Drilled Shaft in Rock	Cu. Yd.	-	46	46
Preformed Joint Strip Seal	Foot	42	-	42
Finger Plate Expansion Joint, 7"	Foot	80	-	80
Finger Plate Expansion Joint, 8"	Foot	40	-	40
Fabric Reinforced Elastomeric Trough	Foot	141	-	141
Elastomeric Bearing Assembly, Type I	Each	6	-	6
Elastomeric Bearing Assembly, Type II	Each	18	-	18
Elastomeric Bearing Assembly, Type III	Each	12	-	12
Anchor Bolt, 1 1/2"	Each	180	-	180
Concrete Sealer	Sq. Ft.	-	2400	2400
Geocomposite Wall Drain	Sq. Yd.	-	76	76
Pipe Underdrains for Structures 4"	Foot	-	168	168
Braced Excavation	Cu. Yd.	-	399	399
Drainage Scupper, DS-11	Each	32	-	32
Underwater Structure Excavation Protection - Location 1	Each	-	1	1
Asbestos Bearing Pad Removal	Each	176	-	176

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

GENERAL NOTES, RIP RAP, SUMMARY of QUANTITIES
F.A.P. 614 (IL 78) OVER SANGAMON RIVER

PUBLIC WATERS
CASS & MASON COUNTIES
SECTION 144 (B-1)
STA. 913+26.00
STRUCTURE NUMBER 009-0510

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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HANSON
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JOB NO.

07S2026

DATE

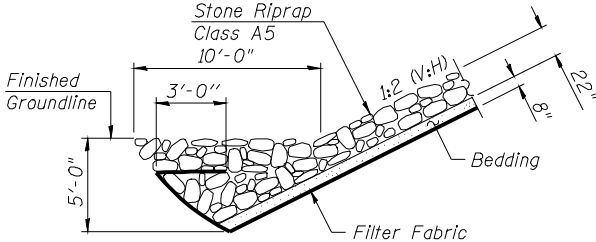
03/27/09

STATION 913+26
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 614 SEC. 144(B-1)
LOADING HL93
STRUCTURE NO. 009-0510

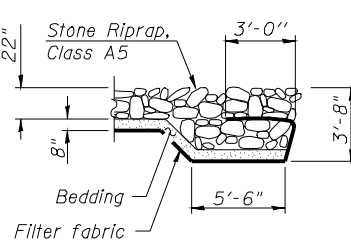
NAME PLATE

See Std. 515001

SECTION THRU TOE OF
RIPRAP SLOPEWALL



SECTION THRU FLANK OF
RIPRAP SLOPEWALL



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LAYOUT	TEH	09/12/08
DRAWN	ROD	09/10/08
REVIEWED	TEH	09/30/08