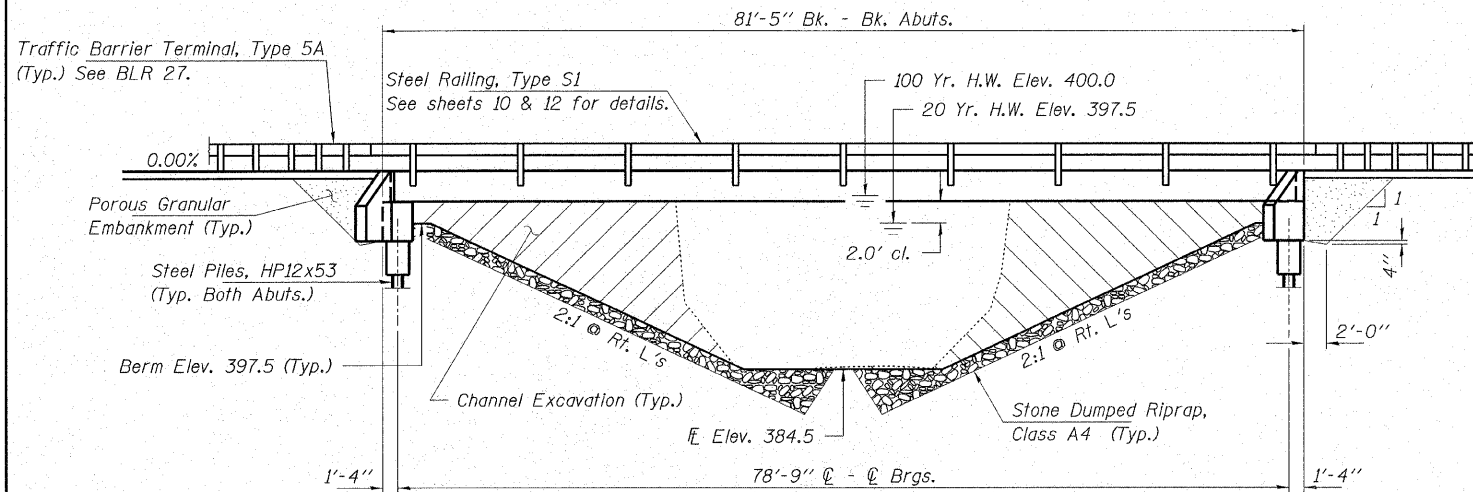


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 7	06-00097-00-BR	UNION	16	9
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 99311	



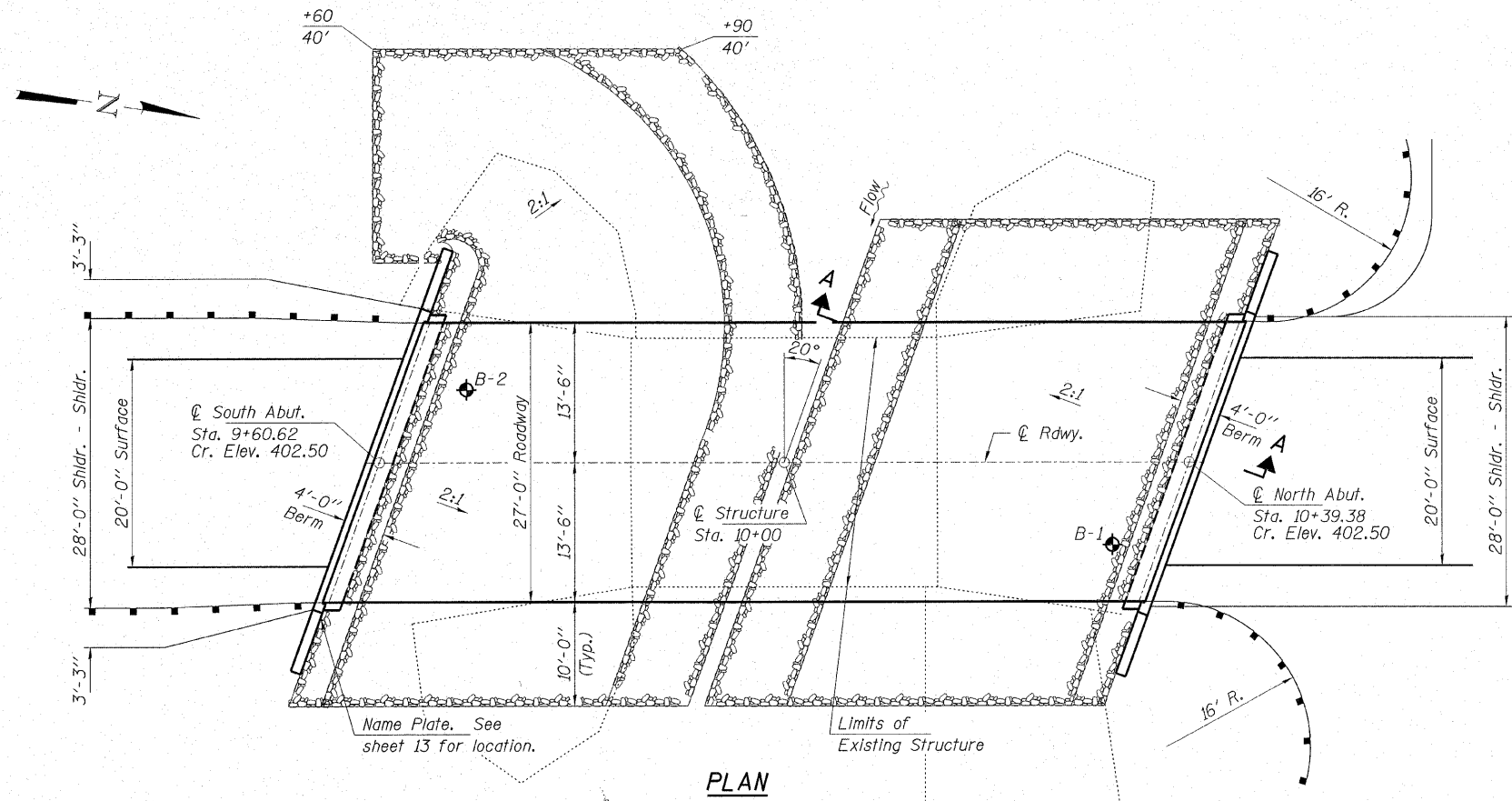
ELEVATION

GENERAL NOTES

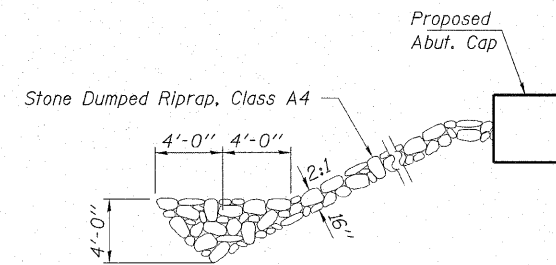
Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.
 The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at South Abutment or approved by the Engineer before ordering the remainder of piles.
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
 Excavation required to construct the Abutments shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation.
 All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act.
 The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.
 Removal of Existing Slopewall is included in cost of Removal Existing Structures.
 See Sheets 15 & 16 for Borings.

BUILT 200_ BY
 UNION COUNTY
 SEC. 06-00097-00-BR
 C.H. 7 / MT. PLEASANT ROAD
 STR. NO. 091-3232
 LOADING HS 20

NAME PLATE
 See Std. 515001

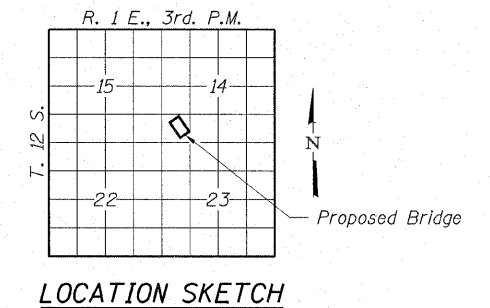


PLAN



SECTION A-A

Note: See Special Provisions for Stone Dumped Riprap, Class A4



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			585
Porous Granular Embankment	Ton			140
Stone Dumped Riprap, Class A4	Ton			430
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		29.6	29.6
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	2,160		2,160
Reinforcement Bars	Pound		3,390	3,390
Steel Railing, Type S1	Foot	168		168
Steel Piles HP12x53	Foot		455	455
Test Pile Steel HP12x53	Each		1	1
Name Plates	Each		1	1

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.) — LF Design

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi ($1/2"$ low lax. strands)
 $f'_{si} = 201,960$ psi ($1/2"$ low lax. strands)
 $f_y = 60,000$ psi (Reinf.)

Loading HS 20-44
 Design Specifications: 2002 AASHTO & all applicable interims.
 25#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = B
 Bedrock Acceleration Coefficient (A) = 0.15g
 Site Coefficient (S) = 1.5

WATERWAY INFORMATION

Drainage Area = 0.4 Sq. Mi.		Low Grade Elev. 402.3 @ Sta. 8+50					
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist. Prop.	Natural H.W.E. Exist. Prop.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.	
Design	20	110	330 550	397.5 ^Q	0.0 0.0	397.5 397.5	
Base							
Overtopping							
Max. Calc.	100	160	390 700	400.0 ^Q	0.0 0.0	400.0 400.0	

^QHigh water level is controlled by backwater from the Cache River.

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Steven W. Mezzanin 2/7/08
 ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-08

HAMPTON, LENZINI & RENWICK, INC.
 CIVIL & STRUCTURAL ENGINEERS
 LAND SURVEYORS
 3085 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 (217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-92-0008-1 DATE: 02/07/08
 DESIGNED: R.J.P. CHECKED: S.W.M. DRAWN: D.A.R.

GENERAL PLAN AND ELEVATION

SECTION 06-00097-00-BR
 C.H. 7 / MT. PLEASANT ROAD
 UNION COUNTY

STRUCTURE NO. 091-3232 / STATION 10+00