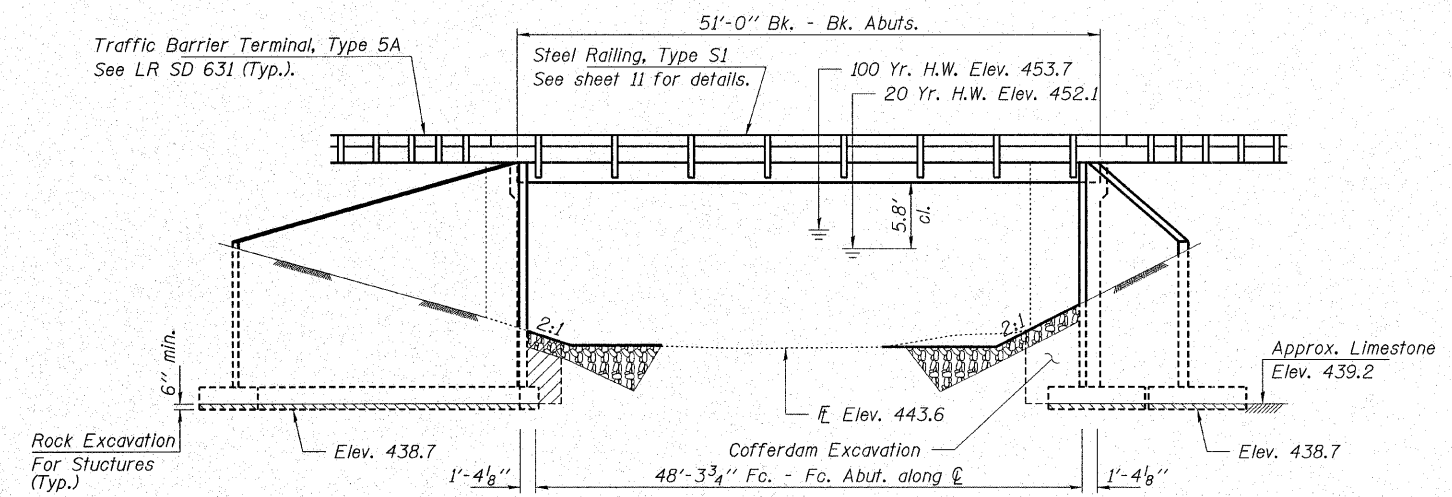


GENERAL NOTES

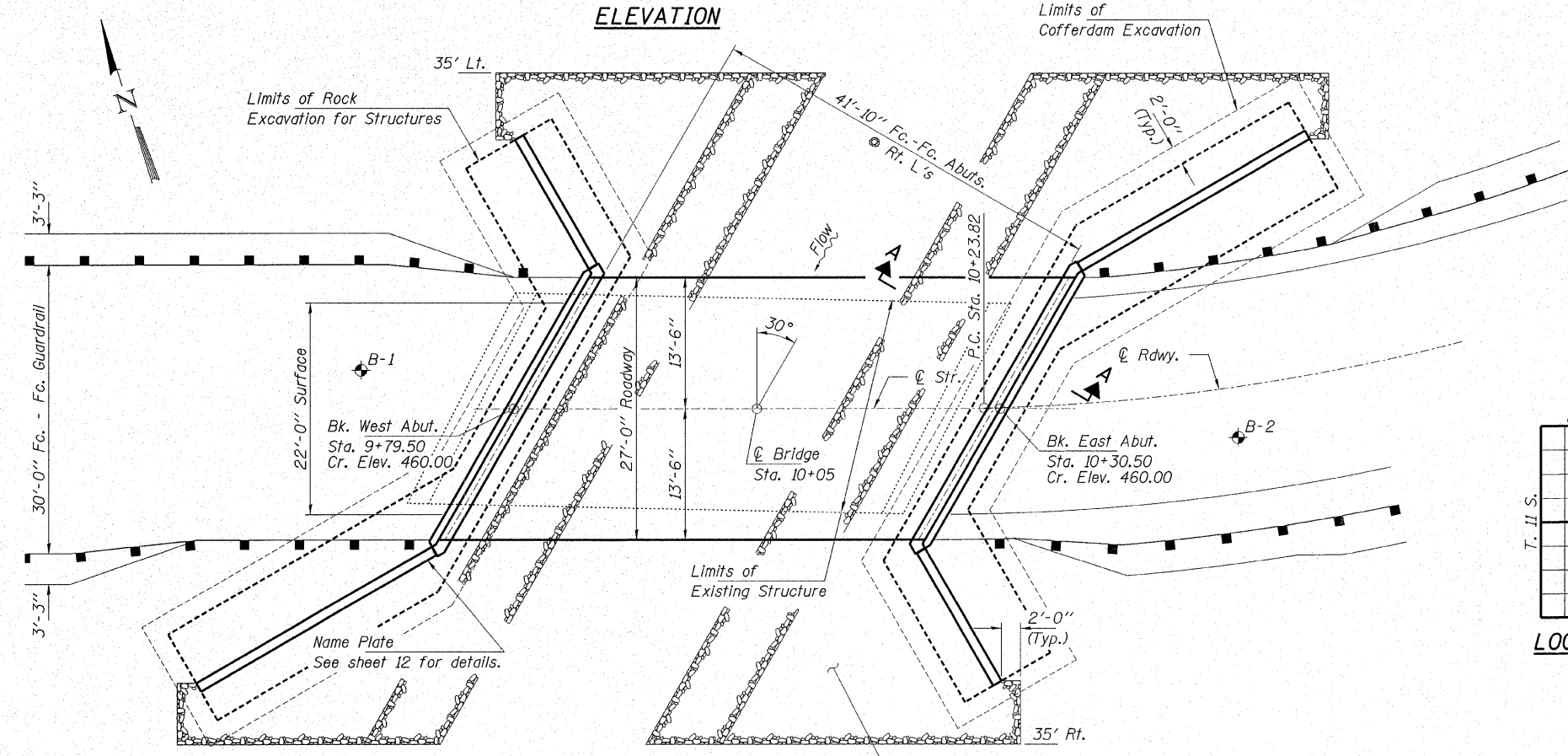
Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.
 All proposed construction activity shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.
 Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322, Grade 60.
 Cofferdam excavation quantity calculated based on expected conditions after removal of existing structure.
 Excavation in Rock shall be performed in accordance with Article 502.05 of the Standard Specifications.
 Excavation behind existing abutment walls shall be done before removing the existing superstructure. This excavation is included in the cost of Removal of Existing Structures.
 No backfill or embankment shall be placed behind the abutments until the deck beams are in place, dowels are grouted and abutment notches are poured. See Article 502.10 of the Standard Specifications.
 The back face of abutments and wingwalls shall be waterproofed according to Article 503.18 of the Standard Specifications.
 See Sheet 15 for Borings.

BUILT 200_ BY
 UNION COUNTY
 SEC. 04-01177-00-BR
 F.A. PROJ. BROS-181(040)
 STR. NO. 091-3222
 LOADING HS 20

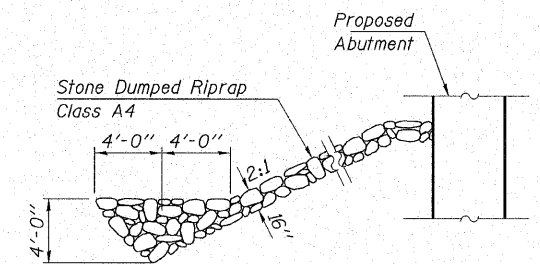
NAME PLATE
 See Std. 515001



ELEVATION

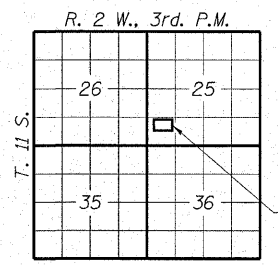


PLAN

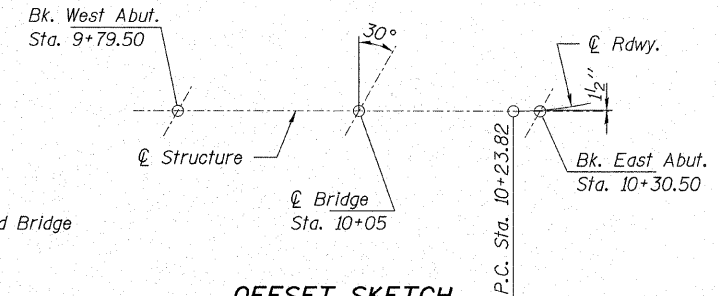


SECTION A-A

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



LOCATION SKETCH



OFFSET SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,377		1,377
Concrete Structures	Cu. Yd.		211.2	211.2
Reinforcement Bars, Epoxy Coated	Pound		23,160	23,160
Steel Railing, Type S1	Foot	111		111
Name Plates	Each		1	1
Rock Excavation for Structures	Cu. Yd.		24.4	24.4
Cofferdams	Each		2	2
Cofferdam Excavation	Cu Yd		560	560
Stone Dumped Riprap, Class A4	Ton			350
Porous Granular Backfill	Ton		790	790

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinf.)

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)
 fy = 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) = 1.0

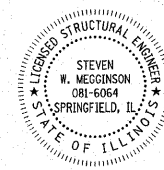
WATERWAY INFORMATION

Drainage Area = 2.6 Sq. Mi. - Low Grade Elev. 454.7 @ Sta. 10+05

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exlst. Prop.	Natural H.W.E. Exlst. Prop.	Head - Ft. Exlst. Prop.	Headwater El. Exlst. Prop.
Design	20	1,760	360 370	452.1 0.0	0.0 0.0	452.1 452.1
Base	100	2,630	420 440	453.7 0.2	0.2 0.2	453.9 453.9
Overtopping						
Max. Calc.	500	3,470	470 500	454.9 0.5	0.4 0.4	455.4 455.3

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 4/2/07
 ILLINOIS STRUCTURAL NO. 6064



Expires 11-30-08

HAMPTON, LENZINI & RENWICK, INC.
 CIVIL & STRUCTURAL ENGINEERS

3085 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 (217) 646-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-92-0007-1 DATE: 04/03/07
 DESIGNED: J.W.F. CHECKED: S.W.M. DRAWN: D.B.

GENERAL PLAN AND ELEVATION

SECTION 04-01177-00-BR
 T.R. 79A / MOUNTAIN GLEN ROAD
 UNION COUNTY
 STR. NO. 091-3222 / STATION 10+05