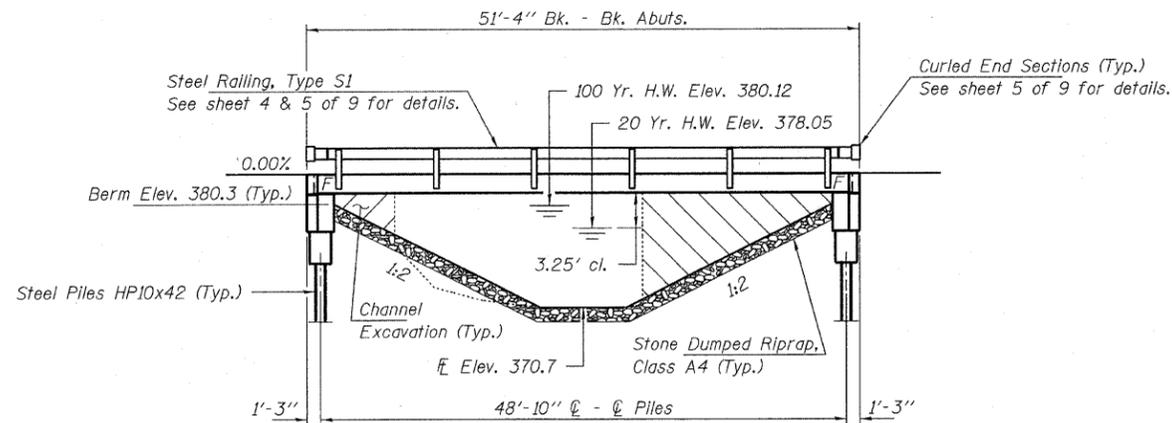


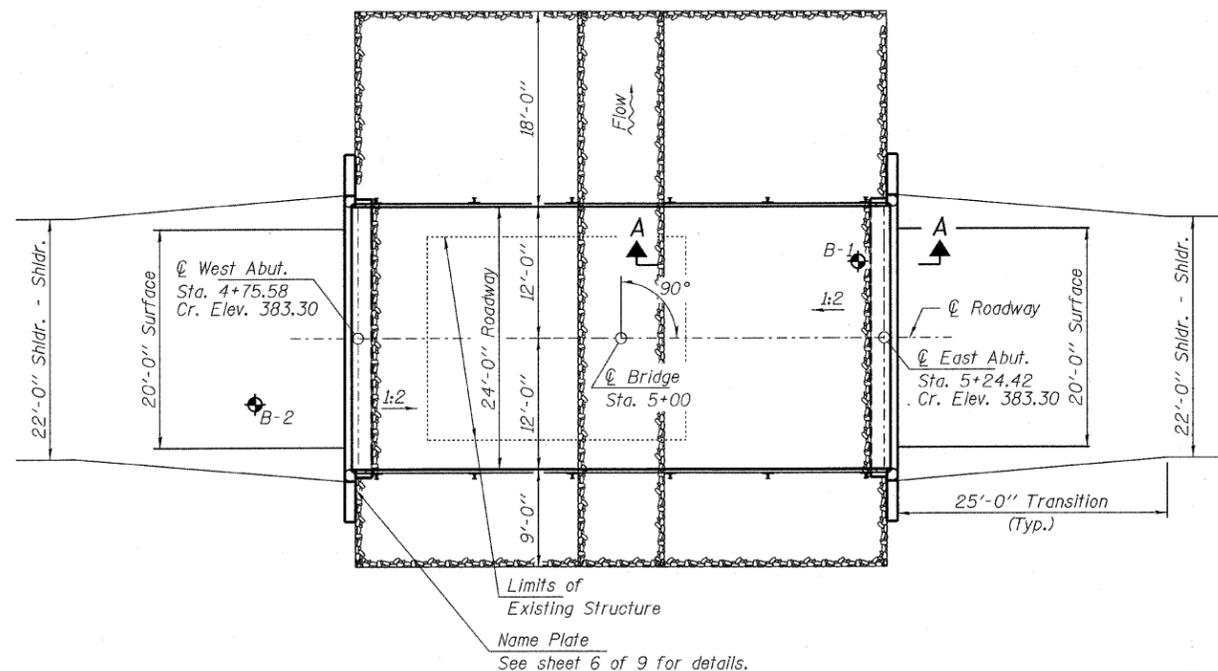
BENCHMARK:

EXISTING STRUCTURE: 24' single span concrete deck beam bridge with timber caps, mudwalls and piling.
Structure closed to traffic.

No Salvage



ELEVATION



PLAN

DESIGN STRESSES

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (1/2" low lax. strands)
fpbt = 201,960 psi (1/2" low lax. strands)
fy = 60,000 psi (Reinf.)

LOADING HL-93

Design Specifications: 2007 AASHTO LRFD with all applicable interims.
50#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.225g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.617g
Soil Site Class = C

WATERWAY INFORMATION

Drainage Area = 1.3 Sq. Mi.		Existing Low Grade Elev. 382.80 @ Sta. 3+00		Proposed Low Grade Elev. 382.80 @ Sta. 3+00	
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Natural Head - Ft.	Headwater El.
Design	20	770	130.9	159.5	378.05
	100	1230	165.8	239.5	380.12
Max. Calc.				0.26	0.03
				378.15	378.09
				380.38	380.15

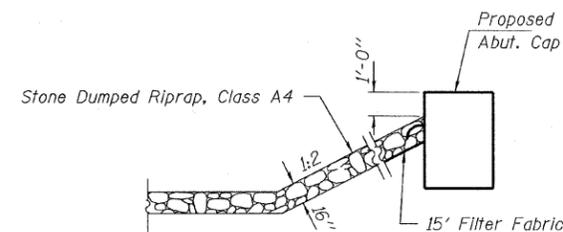
GENERAL NOTES

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at West 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. See Sheets 8 & 9 of 9 for Borings.

BUILT 20__ BY
WHITE COUNTY
SEC. 08-07120-00-BR
HERALDS PRAIRIE ROAD DISTRICT
STR. NO. 097-3267
LOADING HL-93

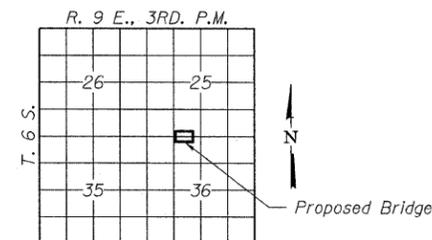
NAME PLATE

See Std. 515001



SECTION A-A

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



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			192
Stone Riprap, Class A4	Ton			230
Filter Fabric	Sq. Yd.			170
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		22.2	22.2
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,200		1,200
Reinforcement Bars	Pound		2,430	2,430
Steel Railing, Type S1	Foot	95		95
Furnishing Steel Piles HP10x42	Foot		490	490
Driving Piles	Foot		490	490
Test Pile Steel HP10x42	Each		1	1
Name Plates	Each		1	1

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 LRFD Specifications."

Steven W. Mugginson 8/19/2009
ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-2010

**GENERAL PLAN AND ELEVATION
STRUCTURE NO. 097-3267**

DESIGNED - A.S.L.
CHECKED - S.W.M.
DRAWN - D.A.B.
CHECKED - D.T.M.

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 548-3400

SHEET NO. 1
9 SHEETS

FAS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
890	08-07120-00-BR	WHITE	12	4
HERALDS PRAIRIE ROAD DISTRICT		CONTRACT NO. 99408		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID	PROJECT BROS-01931042	