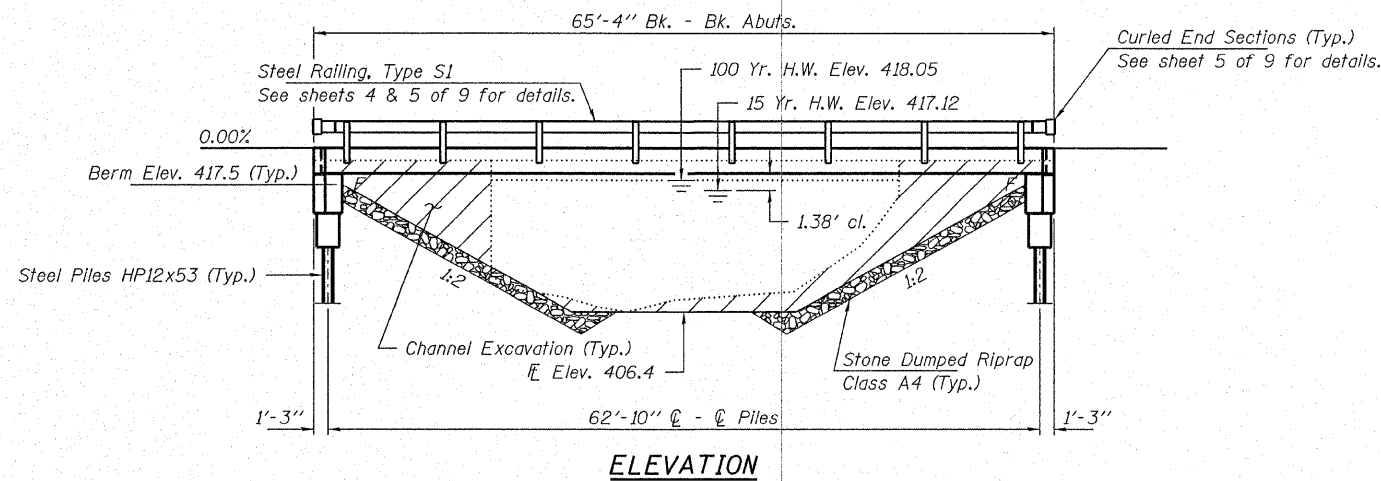
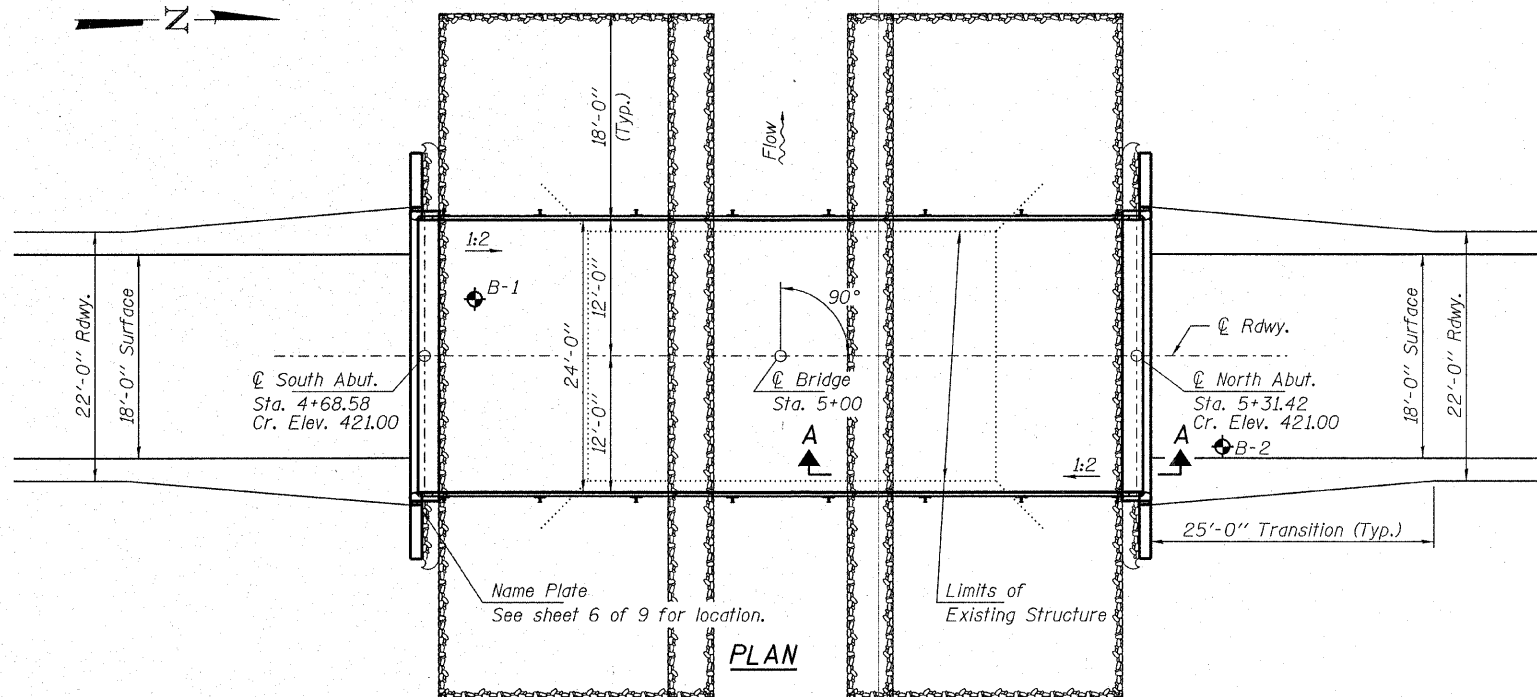


EXISTING STRUCTURE: Sta. 5+01.8 - Single span precast deck beam bridge on closed timber abutment and timber wingwalls. 36.0' bk. - bk.; 22.0' o. to o. deck Structure closed to traffic.



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) = 3
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.393g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.835g
Soil Site Class = E

WATERWAY DATA

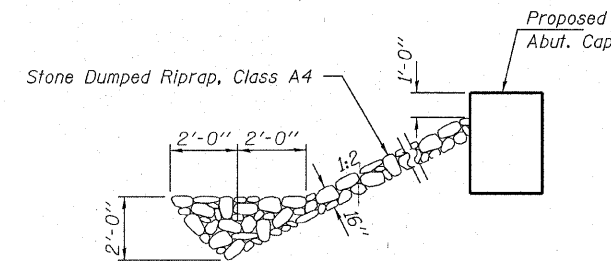
Drainage Area..... 8.1 Sq. Mi.
Existing Opening (15 yr)..... 259 Sq. Ft.
Req'd Opening (15 yr)..... 358 Sq. Ft.
Proposed Opening (15 yr)..... 358 Sq. Ft.
Design Discharge (15 yr)..... 2,157 C.F.S.
Created Head (15 yr)..... 0.11 Ft.
100 Yr. Discharge..... 3,700 C.F.S.
100 Yr. Created Head..... 0.67 Ft.

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. See Sheets 8 & 9 of 9 for Borings.

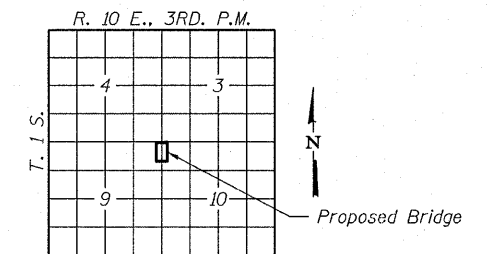
WEST VILLAGE CREEK
BUILT 200_ BY
EDWARDS COUNTY
SEC. 06-00061-00-BR / C.H. 4
F.A. PROJ. BROS-047(031)
STR. NO. 024-3136
LOADING HL-93

NAME PLATE
See Std. 515001



SECTION A-A

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



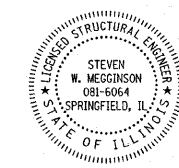
LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			348
Stone Dumped Riprap, Class A4	Tons			300
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		23.6	23.6
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1,536		1,536
Reinforcement Bars	Pound		2,520	2,520
Steel Railing, Type S1	Foot	123		123
Furnishing Steel Piles HP12x53	Foot		560	560
Driving Piles	Foot		560	560
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 Standard Specifications for Highway Bridges".

Steven W. Megginson 1/29/2010
ILLINOIS STRUCTURAL ENGINEER NO. 081-6064



Expires 11-30-2010

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 024-3136

DESIGNED - S.M.S.
CHECKED - S.W.M.
DRAWN - D.T.M.
CHECKED - D.T.M.

HAMPTON, LENZINI & RENWICK, INC. CIVIL & STRUCTURAL ENGINEERS LAND SURVEYORS HLR 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 (217) 548-3400 PROJECT NUMBER: 08.0184.130 DATE: 11/05/08	SHEET NO. 1	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		4	06-00061-00-BR	EDWARDS	13	5
				CONTRACT NO. 95571		
		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		