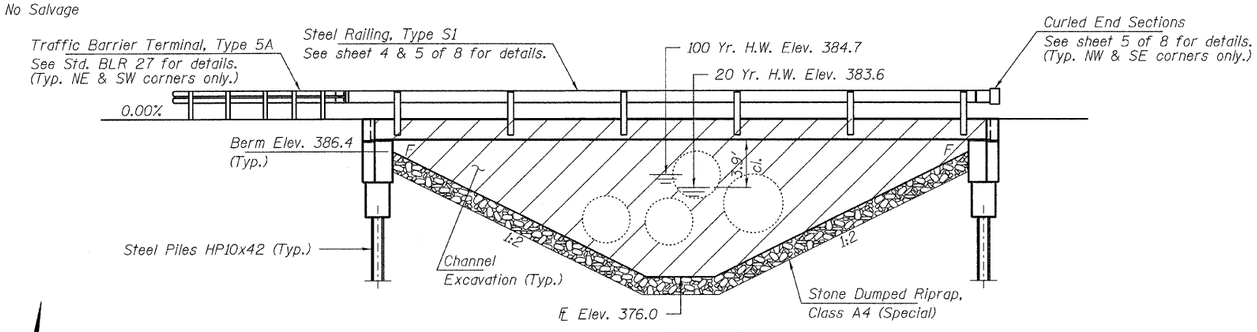
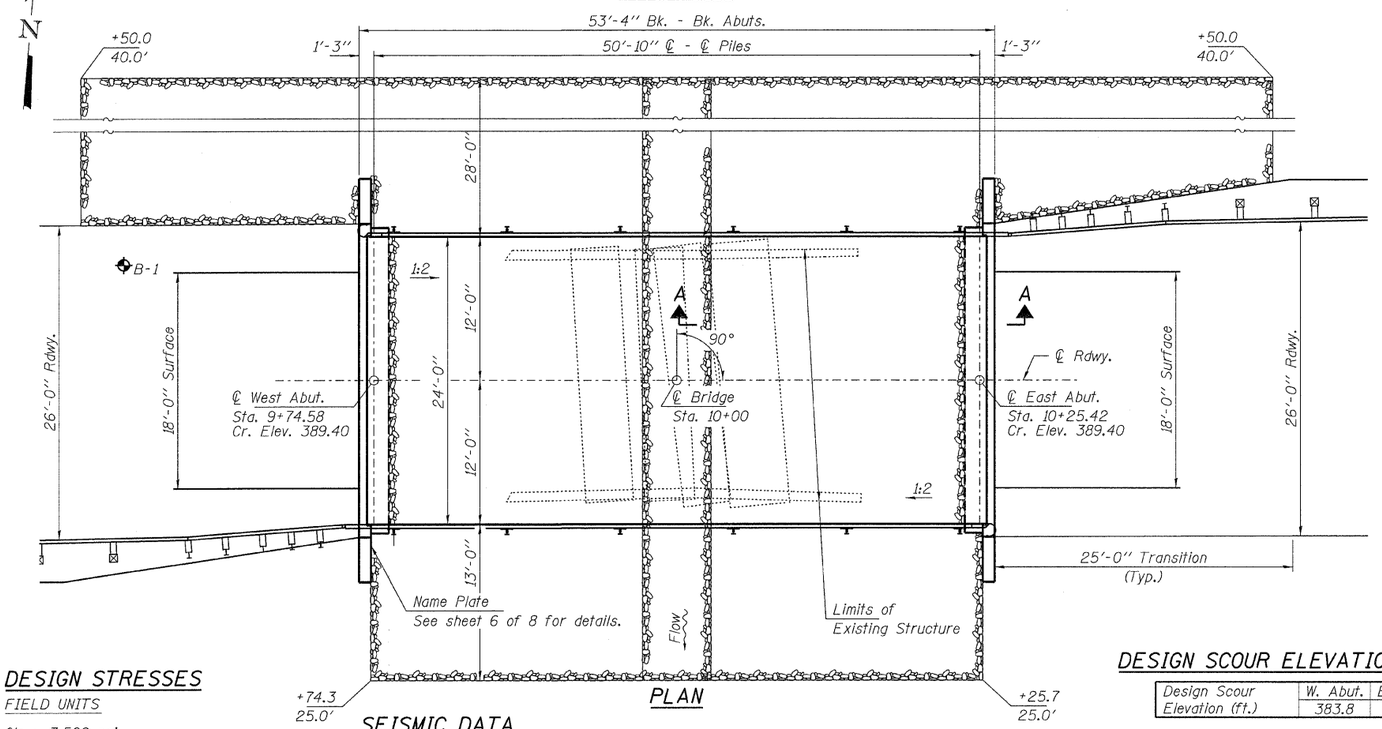
BENCHMARK:

EXISTING STRUCTURE: Sta. 10+00 - 3-48"ϕ Pipes, 1-60"ϕ Pipe with concrete headwall.
21.8' o.-o. headwall
Structure closed to traffic.

No Salvage



ELEVATION



PLAN

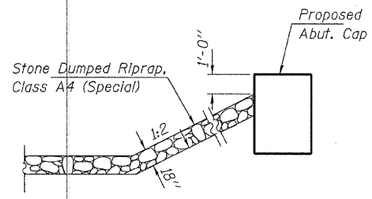
GENERAL NOTES

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. 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.

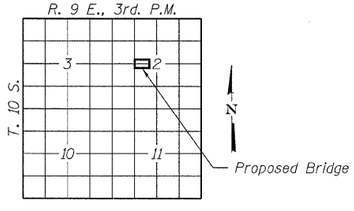
All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.



SECTION A-A

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

INDEX OF STRUCTURE SHEETS



LOCATION SKETCH

UNNAMED STREAM
BUILT 201_ BY
GALLATIN COUNTY
SEC. 10-00075-00-BR
STR. NO. 030-3134
LOADING HL-93

NAME PLATE

See Std. 515001

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 (½"ϕ low lax. strands)
fpbt = 201,960 psi (½"ϕ low lax. strands)
fy = 60,000 psi (Reinf.)

LOADING HL-93

Design Specifications: 2010 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. (S_{D1}) = 0.319g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.746g
Soil Site Class = D

WATERWAY INFORMATION

Drainage Area = 0.5 Sq. Mi.
Existing Low Grade Elev. 389.0 @ Sta. 10+00
Proposed Low Grade Elev. 389.4 @ Sta. 10+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Natural H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	20	880	44	160	383.6	-	-	-	-
Base	100	1340	51	210	384.7	-	-	-	-
Max. Calc.	500	1880	55	250	385.7	-	-	-	-

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	383.8	383.8

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. Megginson 3/14/2011
ILLINOIS STRUCTURAL NO. 081-6064

LICENSED STRUCTURAL ENGINEER
STEVEN W. MEGGINSON
081-6064
SPRINGFIELD, IL
STATE OF ILLINOIS

Expires 11-30-2012

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			435
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		22.0	22.0
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,248		1,248
Reinforcement Bars	Pound		2,340	2,340
Steel Railing, Type S1	Foot	105		105
Furnishing Steel Piles HP10x42	Foot		240	240
Driving Piles	Foot		240	240
Name Plates	Each		1	1
Stone Dumped Riprap, Class A4 (Special)	Ton			630

FILE NAME = 100231-sht-bridge.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000969	PLOT SCALE =	DRAWN - D.T.M.	REVISED -
	PLOT DATE = 3/14/2011	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
GALLATIN COUNTY HIGHWAY DEPARTMENT

GENERAL PLAN & ELEVATION
STRUCTURE NO. 030-3134
SHEET NO. 1 OF 8 SHEETS

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
892	10-00075-00-BR	GALLATIN	25	18
		CONTRACT NO. 99456		
		ILLINOIS FED. AID PROJECT		