

BENCHMARK: I.P. ±0.96' Rt. Sta. ±5+00.85

EXISTING STRUCTURE NO. 033-3127; Sta. 5+00. Single span steel pony truss bridge with timber deck on closed concrete abutments and wingwalls. 60.0' bk.-bk. abutts.; 13.8' o.-o. deck Structure closed to traffic.

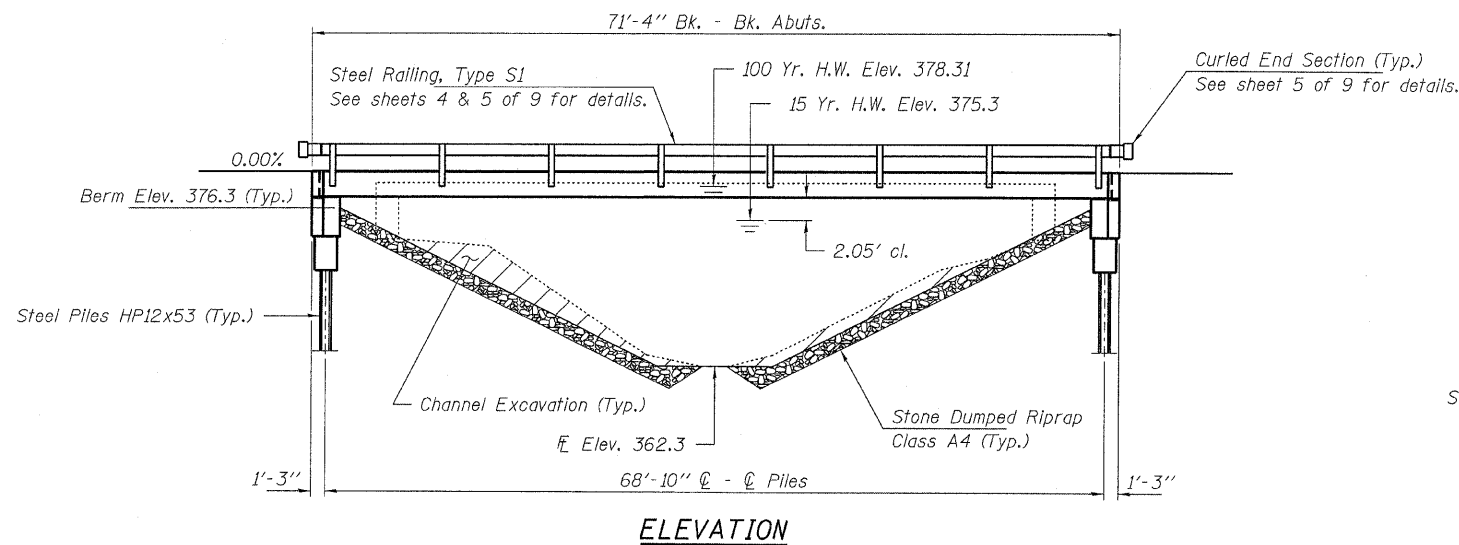
No Salvage

GENERAL NOTES

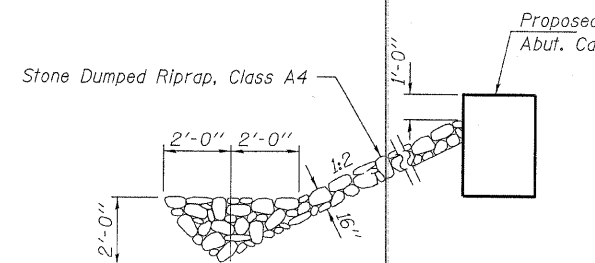
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
 Reinforcement bars shall conform 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.

SOUTHERN OUTLET
 BUILT 20__ BY
 HAMILTON COUNTY
 SEC. 08-01116-00-BR
 BEAVER CREEK ROAD DISTRICT
 STR. NO. 033-3313
 LOADING HL-93

NAME PLATE
 See Std. 515001

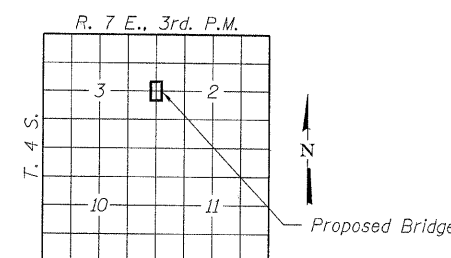


ELEVATION

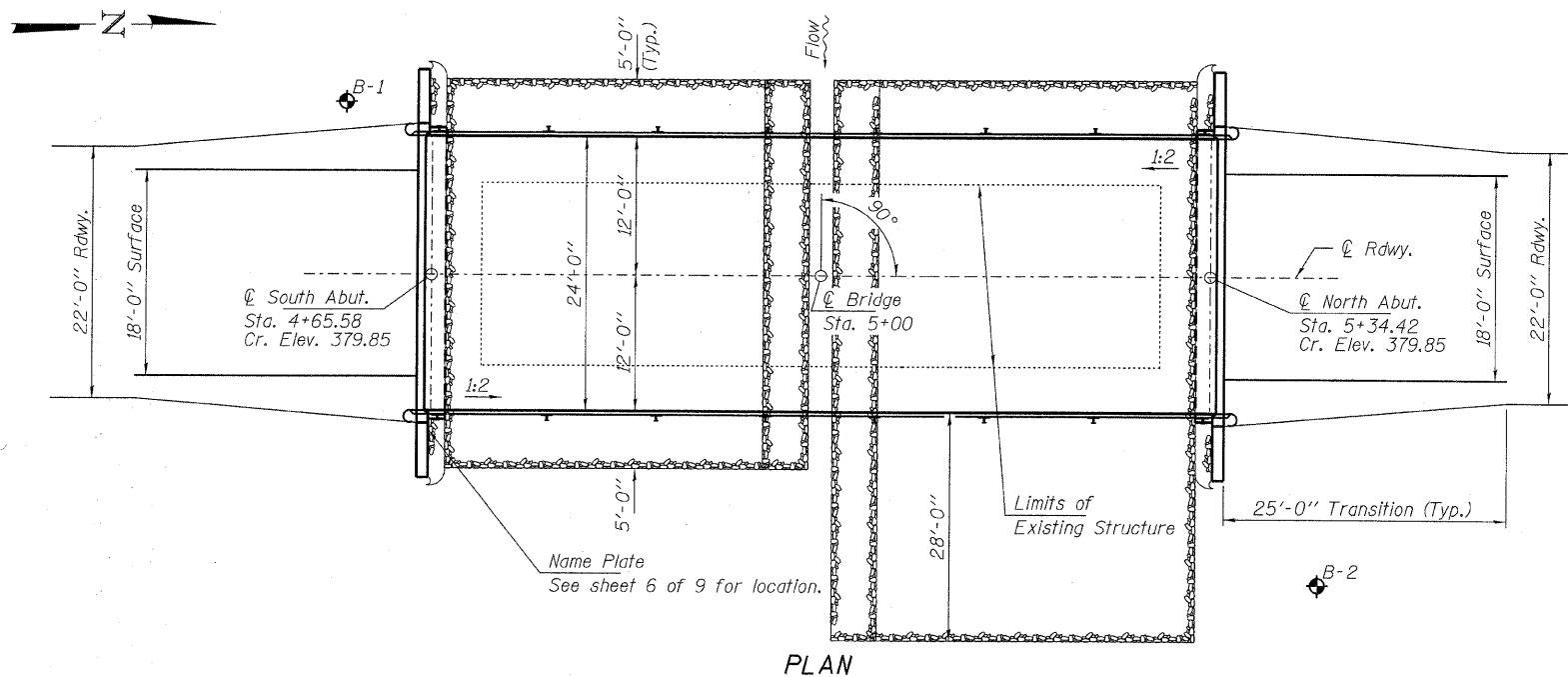


SECTION A-A

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



LOCATION SKETCH



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			55
Stone Dumped Riprap, Class A4	Ton			280
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		23.8	23.8
Concrete Encasement	Cu. Yd.		2.6	2.6
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1,680		1,680
Reinforcement Bars	Pound		2,530	2,530
Steel Railing, Type S1	Foot	140		140
Furnishing Steel Piles HP12x53	Foot		400	400
Driving Piles	Foot		400	400
Name Plates	Each		1	1

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

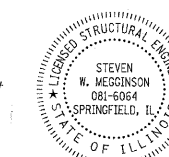
Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.300g
 Design Spectral Acceleration at 0.2 sec. (SD5) = 0.720g
 Soil Site Class = D

WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural Head - Ft.		Headwater El.	
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.
Design	15	3200	408	468	375.3	0.13	0.05	375.35
Base	100	5330	544	593	378.31	0.39	0.33	378.7
Max. Calc.	500	7250		593	381.06		0.62	

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 1/27/2011
 ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-2012

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 033-3313

DESIGNED -	S.W.M.
CHECKED -	V.J.H.
DRAWN -	D.T.M.
CHECKED -	S.W.M.

HAMPTON, LENZINI AND RENWICK, INC. CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 217.546.3400 www.hirengineering.com <small>194.000995 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION</small>	SHEET NO. 1	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	9 SHEETS	454	08-01116-00-BR	HAMILTON	13	5
PROJECT NUMBER: 09.0069.130	DATE: 04/27/10	BEAVER CREEK ROAD DISTRICT		CONTRACT NO. 99442		
		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT BROS-065(045)		