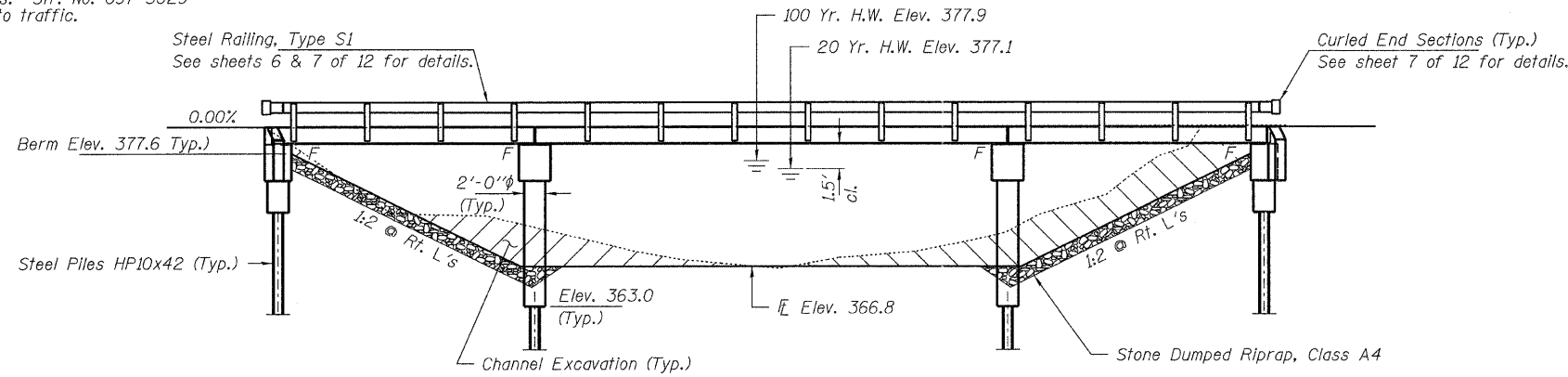


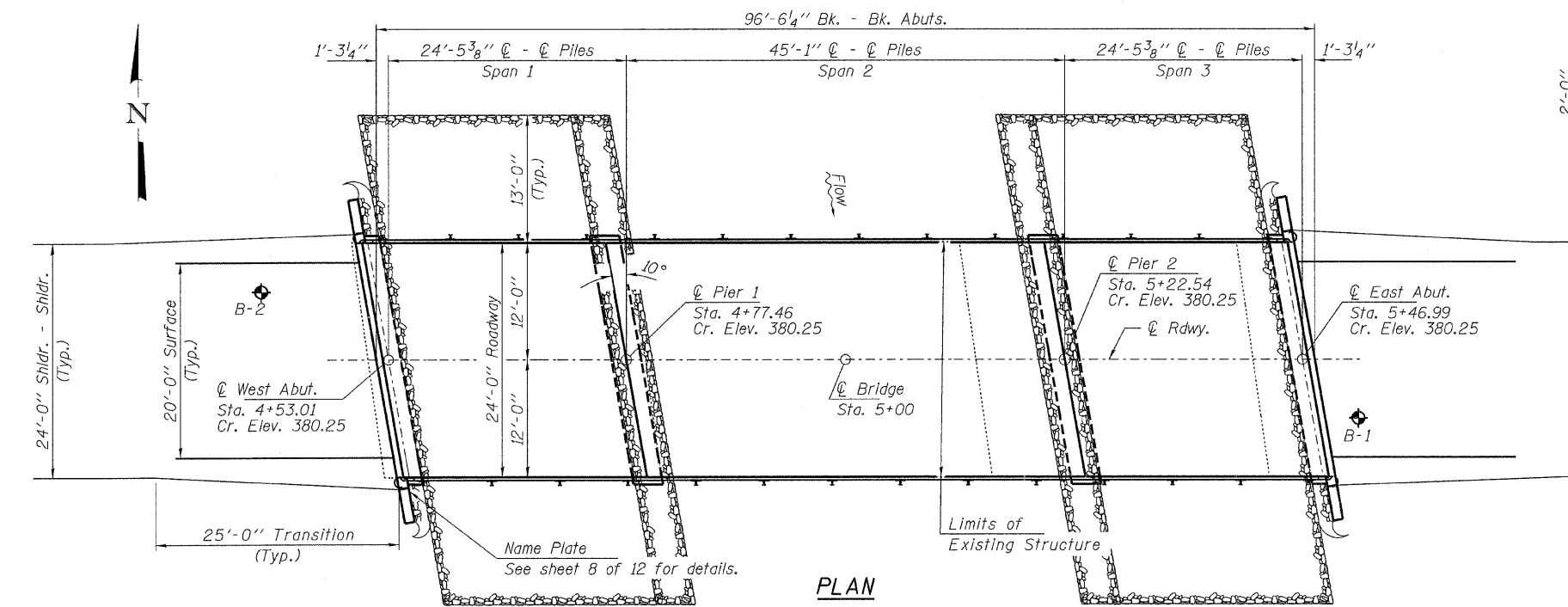
**BENCHMARK:**

EXISTING STRUCTURE: Three span Girder bridge with concrete deck and abutments on wood piling and concrete slopewalls. 91.0' bk.-bk. abuts. Str. No. 097-3029 Structure closed to traffic.

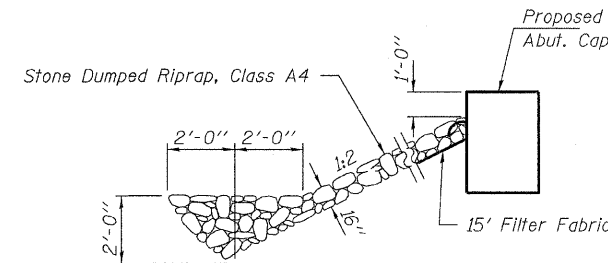
No Salvage



**ELEVATION**

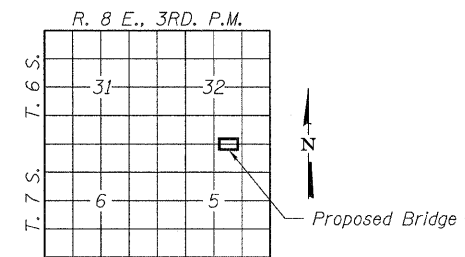


**PLAN**



**SECTION A-A**

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



**LOCATION SKETCH**

**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.

**INDEX OF STRUCTURE SHEETS**

1. General Plan & Elevation
2. Superstructure - Spans 1 & 3
3. Superstructure Details - Spans 1 & 3
4. Superstructure - Span 2
5. Superstructure Details - Span 2
6. Superstructure Details
7. Steel Railing, Type S1
8. Abutments
9. Piers
10. Pile Details
- 11-12. Borings

BEAR CREEK  
BUILT 201 BY  
WHITE COUNTY  
SEC. 07-00104-00-BR  
INDIAN CREEK ROAD DISTRICT  
STR. NO. 097-3271  
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 (1/2" φ low lax. strands)  
fpbt = 201,960 psi (1/2" 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<sub>D1</sub>) = 0.315g  
Design Spectral Acceleration at 0.2 sec. (S<sub>D5</sub>) = 0.742g  
Soil Site Class = D

**WATERWAY INFORMATION**

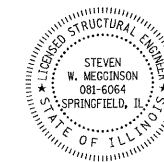
Drainage Area = 26.7 Sq. Mi.		Existing Low Grade Elev. 374.5 @ Sta. 2+00		Proposed Low Grade Elev. 374.66 @ Sta. 2+00			
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Natural H.W.E. Prop.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.	
Design	20	4117	516	377.11	-	0.00	377.29
Base	100	6200	575	377.88	0.18	0.17	378.06
Max. Calc.	500	-	-	-	-	-	-

**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	375.0	358.8	358.8	375.0

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. Meccinson 10/10/11  
ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-2012

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			275
Stone Dumped Riprap, Class A4	Ton			240
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		42.2	42.2
Concrete Encasement	Cu. Yd.		16.8	16.8
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	2,280		2,280
Reinforcement Bars	Pound		4,330	4,330
Steel Railing, Type S1	Foot	186		186
Furnishing Steel Piles HP10x42	Foot		1,170	1,170
Driving Piles	Foot		1,170	1,170
Name Plates	Each		1	1

FILE NAME = 890209-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -	STATE OF ILLINOIS WHITE COUNTY HIGHWAY DEPARTMENT	GENERAL PLAN & ELEVATION STRUCTURE NO. 097-3271 SHEET NO. 1 OF 12 SHEETS	FAS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.W.M.	REVISED -			881	07-00104-00-BR	WHITE	16	5
3045 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62781	PLOT SCALE =	DRAWN - D.A.B.	REVISED -			INDIAN CREEK ROAD DISTRICT		CONTRACT NO. 94451		
ILLINOIS PROFESSIONAL DESIGN FIRM L.S./P.E./S.E. CORP. 184.000589	PLOT DATE = 10/7/2011	CHECKED - S.W.M.	REVISED -			ILLINOIS FED. AID PROJECT				