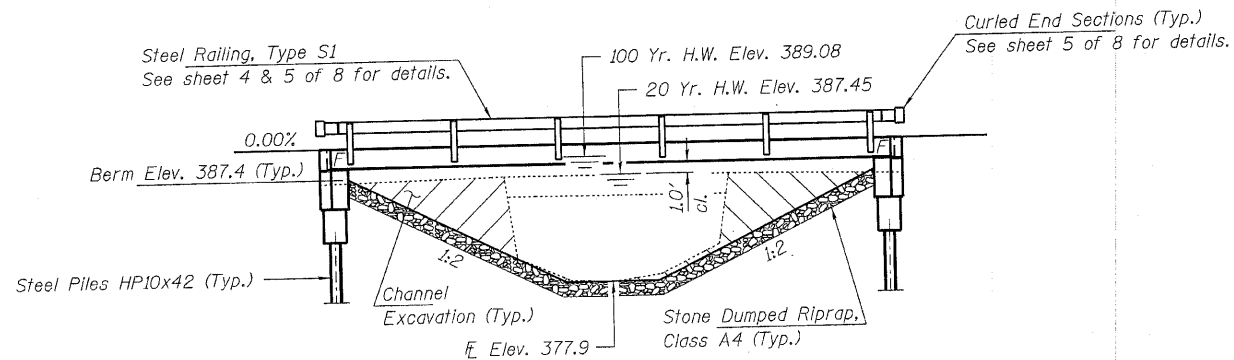
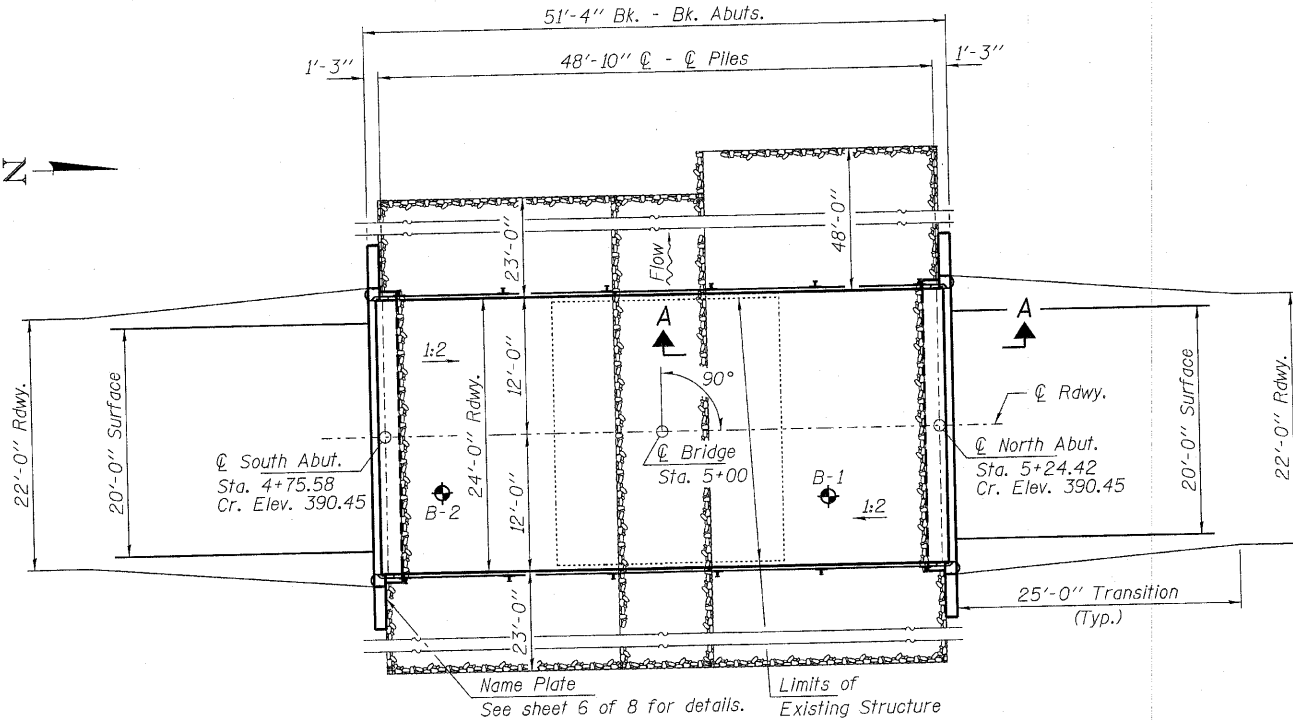


BENCHMARK: Iron Pin Sta. ±4+32.64, 10.75' Rt., Elev. 386.45

EXISTING STRUCTURE NO. 097-3019; Sta. 5+00.5; A single span bridge with concrete deck and curb on wood caps and piling along with wood mudwalls and wingwalls. 20.0' bk.-bk. abuts.; 23.1' o.-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" φ low lax. strands)
fpbt = 201,960 psi (1/2" φ 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.

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.284g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.676g
Soil Site Class = D

WATERWAY INFORMATION

| Drainage Area = 2.4 Sq. Mi. | | Existing Low Grade Elev. 385.8 @ Sta. 6+00 | | Proposed Low Grade Elev. 386.4 @ Sta. 8+00 | | |
|-----------------------------|-----------|--|------------------------------|--|-------------------------|----------------------------|
| Flood | Freq. Yr. | Q C.F.S. | Opening Sq. Ft. Exist. Prop. | Natural H.W.E. Exist. Prop. | Head - Ft. Exist. Prop. | Headwater El. Exist. Prop. |
| Design | 20 | 1360 | 127 260 | 387.45 - 0 | 0 - 0 | 387.45 |
| Base | 100 | 2180 | 127 306 | 389.08 - 0.06 | 0.32 - 0 | 389.14 389.40 |
| Max. Calc. | 500 | - | - | - | - | - |

GENERAL NOTES

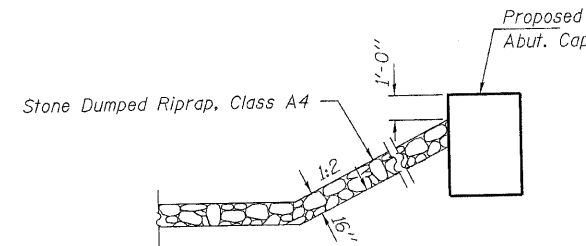
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions. Excavation required to construct the Abutments shall be included in the 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.

BUILT 2011 BY
WHITE COUNTY
SEC. 09-00114-00-BR
PHILLIPS ROAD DISTRICT
STR. NO. 097-3268
LOADING HL-93

NAME PLATE
See Std. 515001

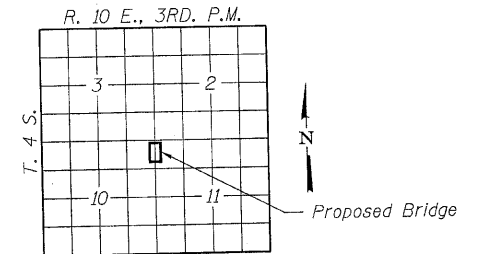
INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. Superstructure
- 3-4. Superstructure Details
5. Steel Railing, Type S-1
6. Abutments
7. HP Pile Details
8. Borings



SECTION A-A

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



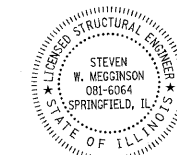
LOCATION SKETCH

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|---|---------|-------|-------|-------|
| Channel Excavation | Cu. Yd. | | | 158 |
| Stone Dumped Riprap, Class A4 | Ton | | | 375 |
| 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 | | 2,420 | 2,420 |
| Steel Railing, Type S1 | Foot | 96 | | 96 |
| Furnishing Steel Piles HP10x42 | Foot | | 380 | 380 |
| Driving Piles | Foot | | 380 | 380 |
| 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. Meckinson 7/27/2010
ILLINOIS STRUCTURAL ENGINEER NO. 081-6064



Expires 11-30-2010

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 097-3268

HAMPTON, LENZINI AND RENWICK, INC.
CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS
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SPRINGFIELD, ILLINOIS 62703
217.546.3400 www.hlrengineering.com
184.000959
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION
PROJECT NUMBER: 09.0053.130 DATE: 07/27/10

| | | | | | |
|-------------------------|--------|----------------|---------------------------|--------------|-----------|
| SHEET NO. 1 8 SHEETS | F.A.S. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 1884 | 09-00114-00-BR | WHITE | 12 | 5 |
| FED. ROAD DIST. NO. | | | ILLINOIS FED. AID PROJECT | | |
| CONTRACT NO. 99431 | | | | | |