

GENERAL NOTES

All proposed construction activity 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.

Plan dimensions and details relative to existing structure have been taken from field survey and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The Contractor shall excavate behind the abutments to the elevations shown prior to the removal of the existing deck. The excavation shall be backfilled with Porous Granular Backfill after superstructure rehabilitation has been completed. The excavation required behind the abutments shall be included with Porous Granular Backfill.

Removal of existing bridge rail, concrete deck and backwalls shall be included in the pay item Removal of Existing Concrete Deck.

Fasteners shall be high strength bolts. (AASHTO M164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or 2 in painted areas). Bolts 3/4"φ, open holes 5/8"φ, unless otherwise noted.

Field welding of construction accessories to beams will not be permitted. Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60.

Protective Coat shall be applied to the bridge surface and fascia.

All construction joints shall be bonded, except as noted.

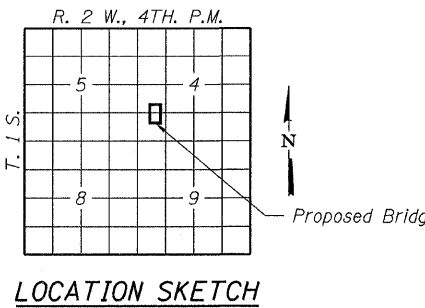
Painting of existing steel when entire structure will be blast cleaned: Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All existing steel shall be cleaned per Near White Blast Cleaning - SSPC-SP10. All existing steel shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Gray, Munsell No 5B 7/1.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete. As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that can not be removed by grinding 1/8" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project. The SSPC-QP1 and SSPC-QP2 Painting Contractor Certifications will be required for this bridge.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			100
Porous Granular Backfill	Ton		70	70
Riprap Special	Ton			100
Removal of Existing Concrete Deck	Each	1		1
Concrete Structures	Cu. Yd.		3.8	3.8
Concrete Superstructure	Cu. Yd.	64.2		64.2
Protective Coat	Sq. Yd.	272		272
Furnishing and Erecting Structural Steel	Pound	1,060		1,060
Structural Steel Repair	Pound	1,030		1,030
Stud Shear Connectors	Each	1,152		1,152
Cleaning and Painting Steel Bridge	L. Sum	1		1
Containment and Disposal of Lead Paint Residues	L. Sum	1		1
Reinforcement Bars, Epoxy Coated	Pound	13,360	290	13,650
Steel Railing, Type S1	Foot	171		171
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	27		27
Elastomeric Bearing Assembly, Type 1	Each	16		16
Anchor Bolts, 1"	Each	32		32
Jacking Existing Superstructure	L. Sum	1		1

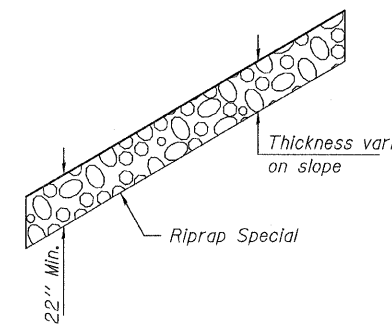


LOCATION SKETCH

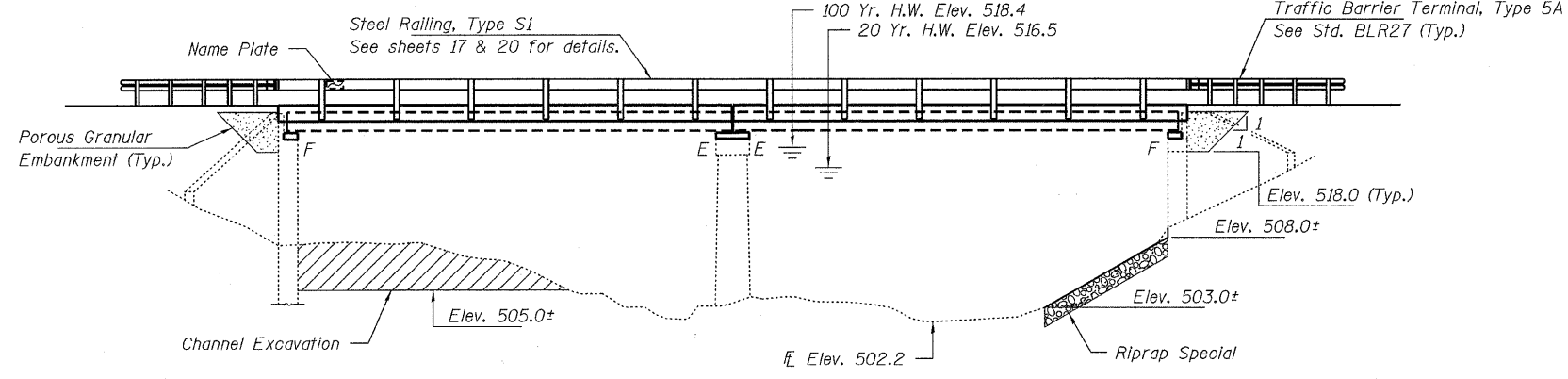
LOGAN CREEK
BUILT 200_ BY
BROWN COUNTY
SEC. 05-00065-00-BR
C.H. 3A / FAS 1583
STR. NO. 005-3006
LOADING HL-93

NAME PLATE

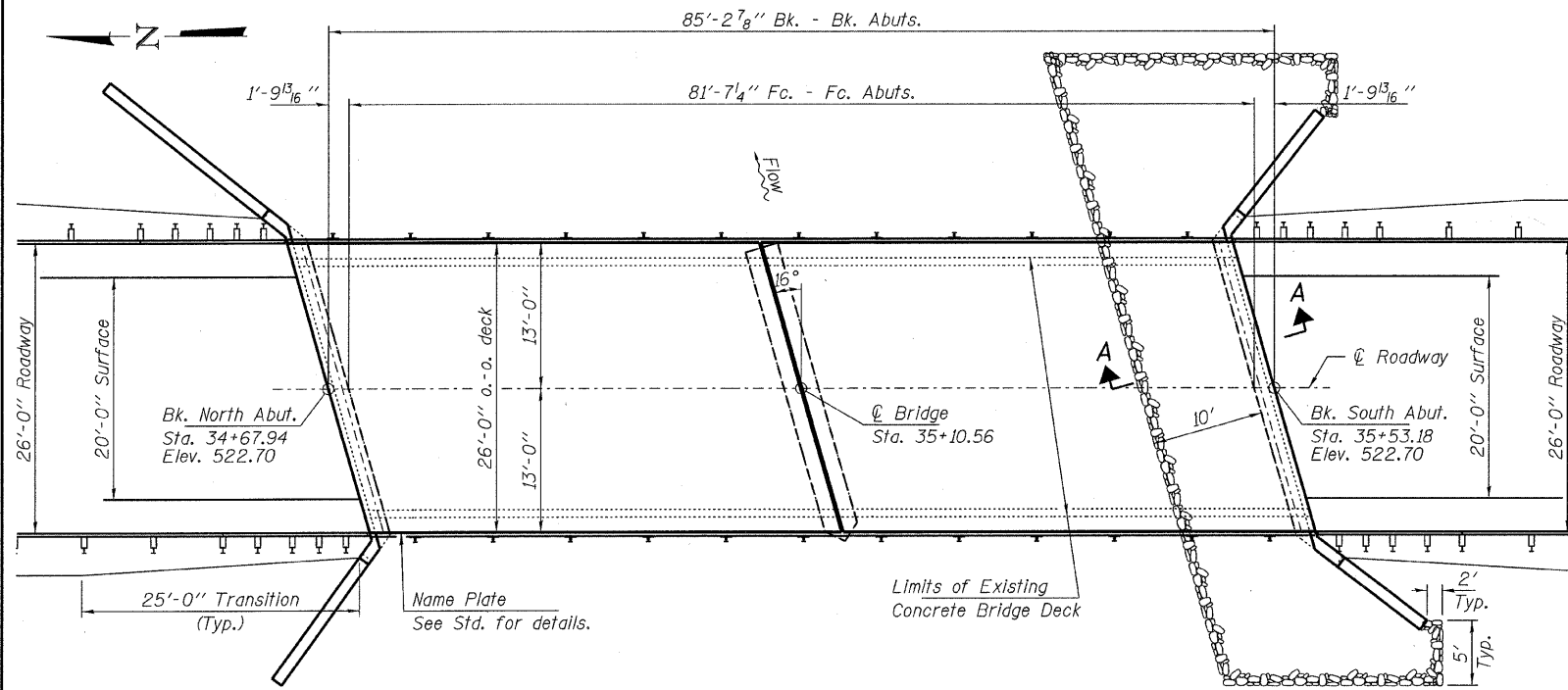
See Std. 515001



SECTION A-A



ELEVATION



PLAN

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
fy = 33,000 p.s.i. (Existing Structural Steel)
n = 9

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.053g
Design Spectral Acceleration at 0.2 sec. (SD5) = 0.129g
Soil Site Class = B

LOADING HL-93 (SLAB)

Design Specifications: 2007 AASHTO LRFD
with all applicable interims.
50#/Sq. Ft. included in dead load for
future wearing surface.

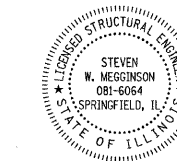
WATERWAY INFORMATION

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	10	2410	720	720	515.11	0.27	0.27	515.38	515.38
Base	20	3020	820	820	516.51	0.38	0.38	516.89	516.89
Max. Calc.	100	4500	970	970	518.37	0.60	0.60	518.97	518.97
	500	6080	1030	1030	519.71	0.41	0.41	520.12	520.12

Drainage Area = 15.4 Sq. Mi. Existing Low Grade Elev. 522.0 @ Sta. 35+10.56
Proposed Low Grade Elev. 522.7 @ Sta. 35+10.56
10 Year Velocity through Existing Bridge = 3.3 fps 10 Year Velocity through Proposed Bridge = 3.3 fps

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 12/30/2009
ILLINOIS STRUCTURAL NO. 081-6064



**GENERAL PLAN AND ELEVATION
STRUCTURE NO. 005-3006**

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

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400
PROJECT NUMBER: 08.0204.130 DATE: 11/10/09

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3A	05-00065-00-BR	BROWN	24	12
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT ARA 1583(103)	
CONTRACT NO. 93509				