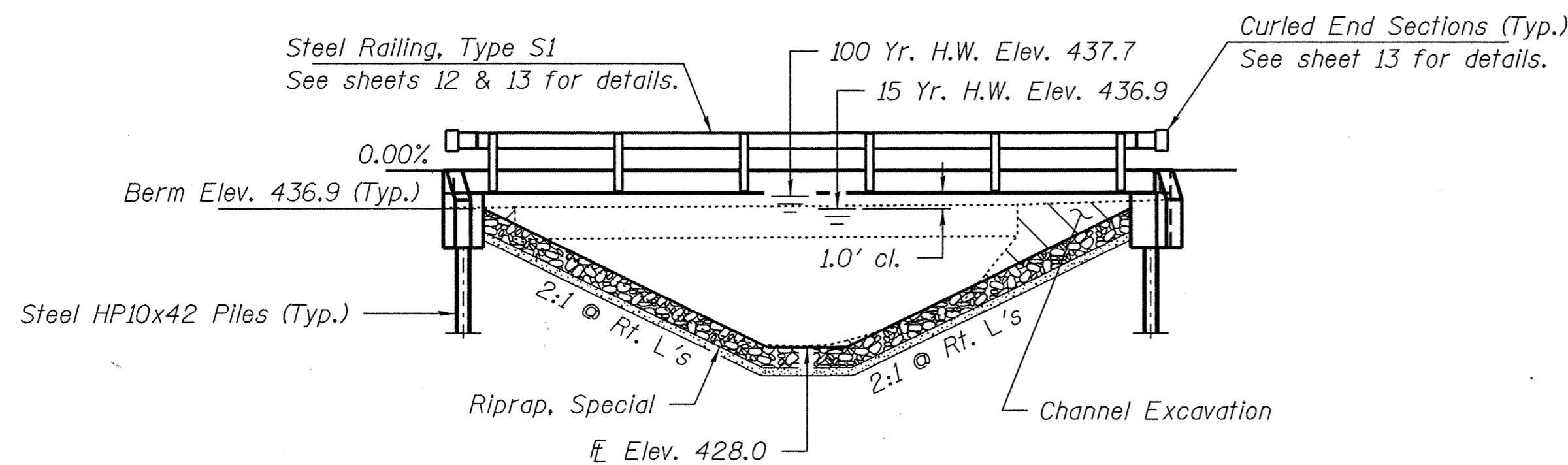


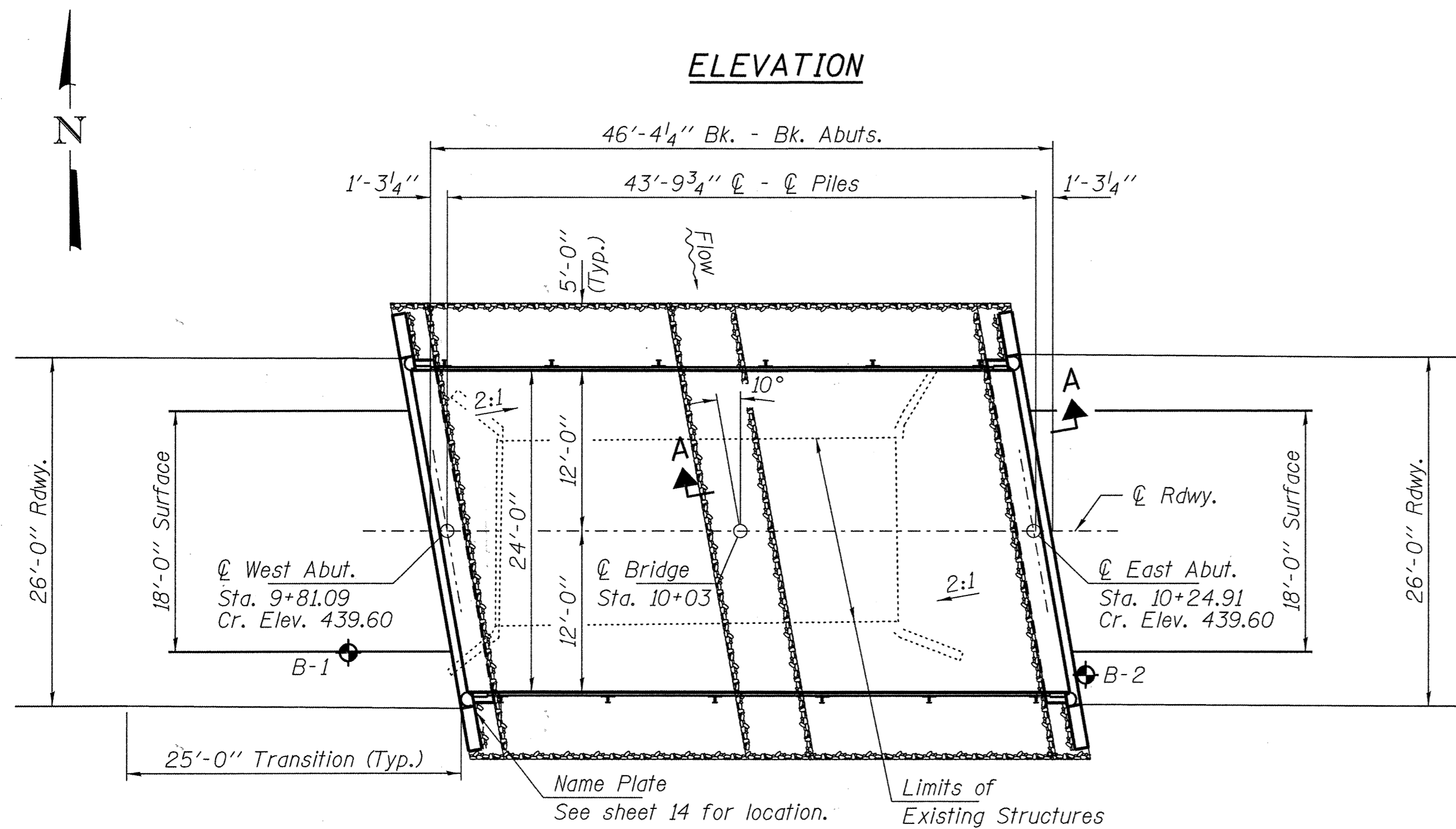
BENCHMARK: Spike Nail in 10"φ tree. Sta. 9+49, 43.9' Lt., Elev. 438.11

EXISTING STRUCTURE: Single span cast in place concrete bridge on closed concrete abutments and wingwalls. 29.0' fc.-fc. abuts.; 13.7' o.-o. deck Structure closed to traffic.

No Salvage



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.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2  
Design Spectral Acceleration at 1.0 sec. (Sp1) = 0.187g  
Design Spectral Acceleration at 0.2 sec. (Sp5) = 0.514g  
Soil Site Class = C

WATERWAY INFORMATION

Drainage Area = 5.4 Sq. Mi. Existing Low Grade Elev. 436.5 @ Sta. 8+50  
Proposed Low Grade Elev. 437.1 @ Sta. 8+55

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Overtopping	10	1320	140	210	436.85	0.75	0.53	437.60	437.38	
Design	15	1510	140	220	436.85	0.75	0.53	437.60	437.38	
Base	100	2500	140	260	437.65	0.77	0.90	438.42	438.55	
Max. Calc.	500	3400	140	270	438.25	0.71	1.05	438.96	439.30	

10 Year Velocity through Existing Bridge = 6.4 Tps 10 Year Velocity through Proposed Bridge = 4.8 Tps

GENERAL NOTES

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.  
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at West Abutment or approved by the Engineer before ordering the remainder of piles.  
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.

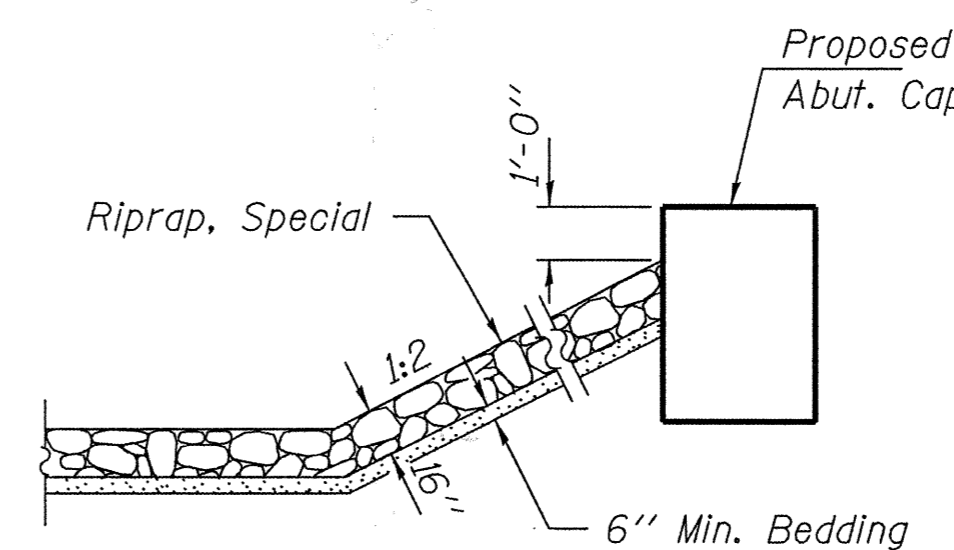
SEMINARY CREEK  
BUILT 20 BY  
CLAY COUNTY  
SEC. 06-11129-00-BR  
STANFORD ROAD DISTRICT  
STR. NO. 013-3235  
LOADING HL-93

NAME PLATE

See Std. 515001

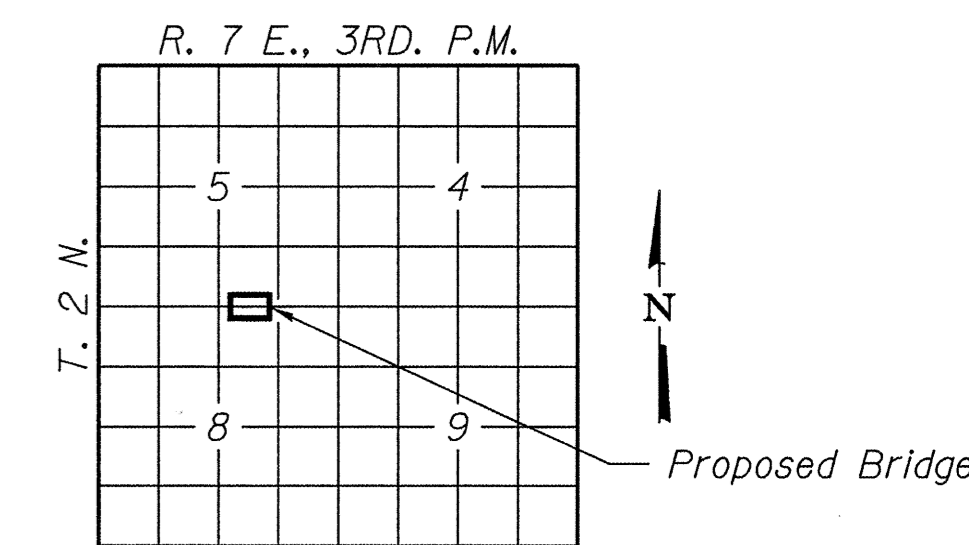
INDEX OF STRUCTURE SHEETS

- 9. General Plan & Elevation
- 10. Superstructure
- 11-12. Superstructure Details
- 13. Steel Railing, Type S-1
- 14. Abutments
- 15. HP Pile Details
- 16. Borings



SECTION A-A

Note: See Special Provisions for Riprap, Special.



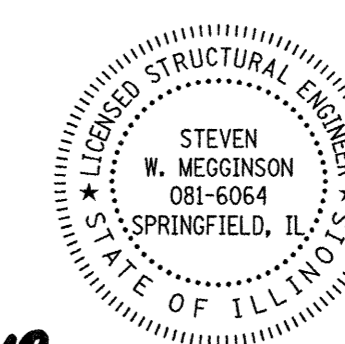
LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			20
Riprap, Special	Ton			140
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		21.8	21.8
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1,080		1,080
Reinforcement Bars	Pound		2,340	2,340
Steel Railing, Type S1	Foot	84		84
Furnishing Steel Piles HP10x42	Foot		175	175
Driving Piles	Foot		175	175
Test Pile Steel HP10x42	Each		1	1
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. Megginson 2/18/2010  
ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-2010

GENERAL PLAN AND ELEVATION  
STRUCTURE NO. 013-3235

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

184.00959  
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION

PROJECT NUMBER: 09.0128 DATE: 02/18/10

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-11129-00-BR	CLAY	16	9
STANFORD ROAD DISTRICT		CONTRACT NO. 95621		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT BROS-025(061)		