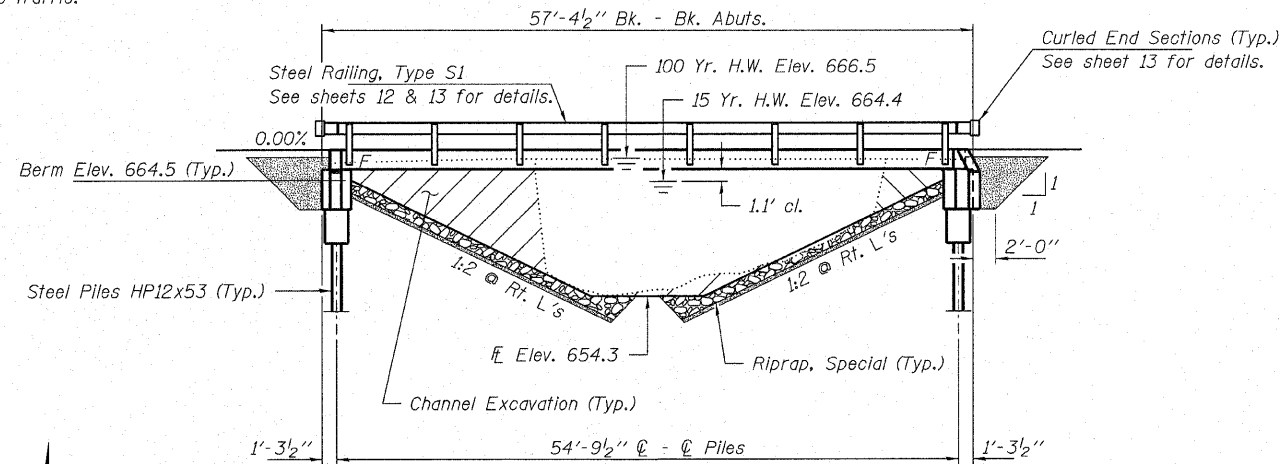


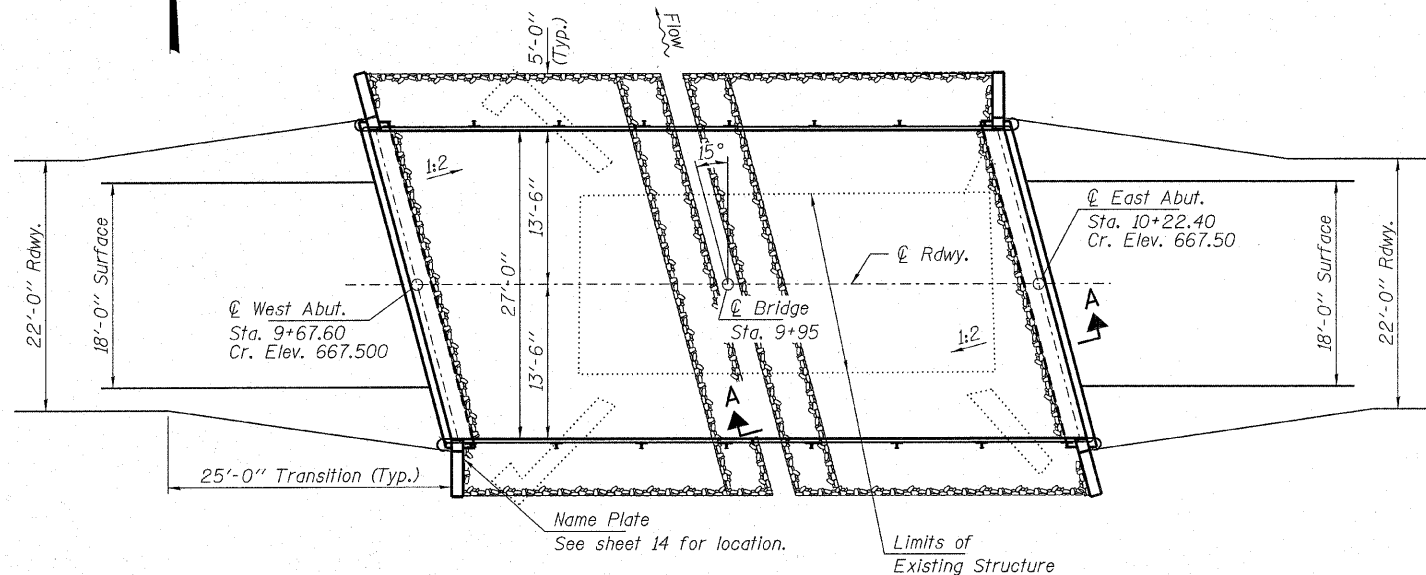
BENCHMARK: Chiseled "□" on N.W. Corner Wingwall. 19' Lt., Sta. 9+76, Elev. 665.53

EXISTING STRUCTURE: Single span pony truss bridge with concrete deck on closed concrete abutments and wingwalls. 30.5' fc.-fc. abuts.; 15.7' o.-o. deck. Structure closed to traffic.

No Salvage



ELEVATION



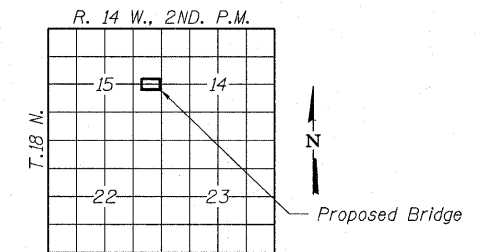
PLAN

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 100% 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. See sheet 16 for Borings.

OLIVE BRANCH
BUILT 200 BY
VERMILION COUNTY
SEC. 01-19135-00-BR
VANCE ROAD DISTRICT
STR. NO. 092-3433
LOADING HL-93

NAME PLATE
See Std. 515001



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			130
Porous Granular Embankment	Ton			100
Riprap, Special	Ton			140
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		23.0	23.0
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,512		1,512
Reinforcement Bars	Pound		2,450	2,450
Steel Railing, Type S1	Foot	109		109
Furnishing Steel Piles HP12x53	Foot		210	210
Driving Piles	Foot		210	210
Test Pile Steel HP12x53	Each		2	2
Pile Shoes	Each		8	8
Name Plates	Each		1	1
Concrete Cut-Off Wall	Cu. Yd.		6.6	6.6

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) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.139g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.245g
Soil Site Class = D

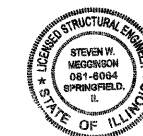
WATERWAY INFORMATION

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.
Design	15	1,189	240	300	664.4	0.1	0.1	664.5	664.5	
Base										
Overtopping	100	1,901	270	360	666.5	0.1	0.1	666.6	666.6	
Max. Calc.	500	2,524	270	360	667.5	0.1	0.1	667.6	667.6	

Drainage Area = 13.6 Sq. Mi. Existing Low Grade Elev. 664.4 @ Sta. 11+00 Proposed Low Grade Elev. 665.0 @ Sta. 12+50
10 Year Velocity through Existing Bridge = 4.8 Tps 10 Year Velocity through Proposed Bridge = 3.8 Tps

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. Magnuson 1/4/09
ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-10

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 092-3433

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

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	01-19135-00-BR	VERMILION	16	9
VANCE ROAD DISTRICT		CONTRACT NO. 91398		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PROJECT NUMBER: 08.0188.130 DATE: 01/13/09