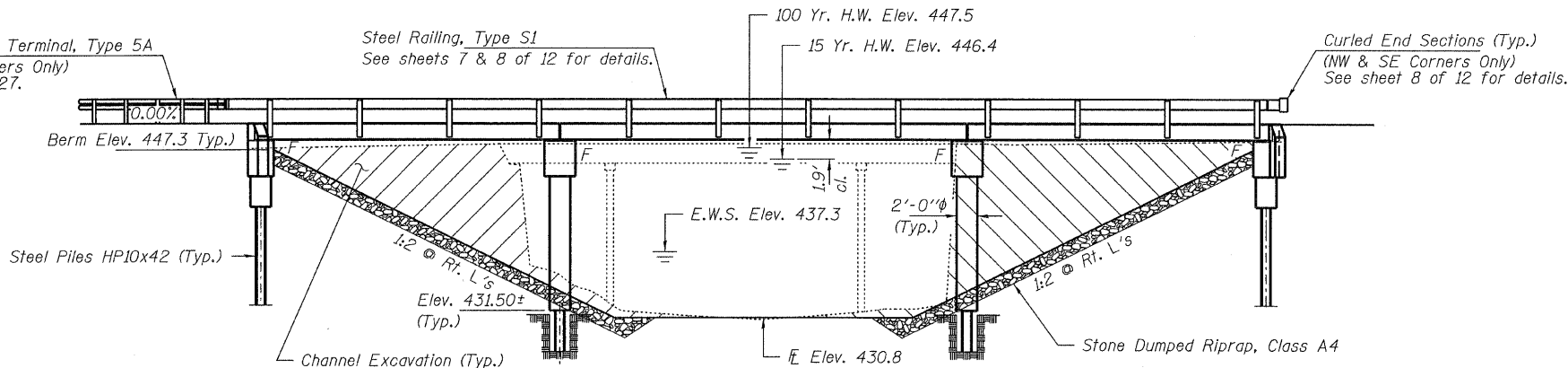


BENCHMARK: Yellow bench tie in power pole. 32' Lt., Sta. 20+28, Elev. 452.66

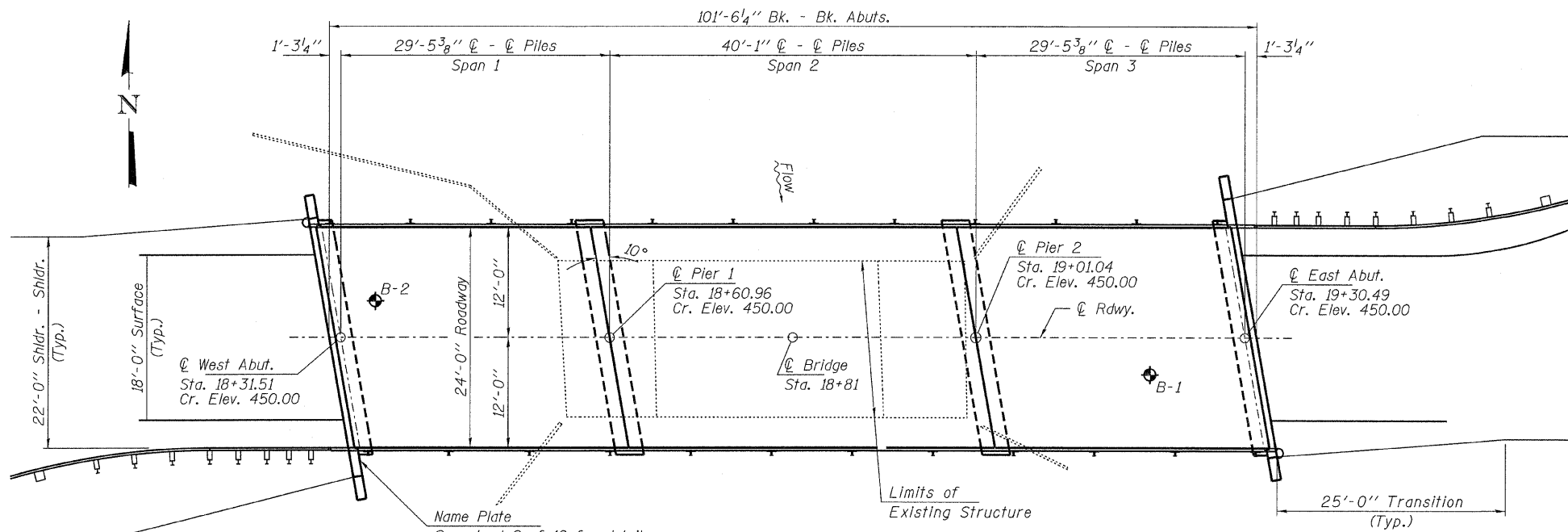
EXISTING STRUCTURE: Three span I-beam bridge with timber deck on closed timber abutments and wingwalls. 43.0' fc.-fc. abuts., 19.9' o.-o. deck. Str. No. 041-3073
Structure closed to traffic during construction.

No Salvage

Traffic Barrier Terminal, Type 5A
(SW & NE Corners Only)
See Std. BLR-27.



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.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
Excavation required to construct the Abutments and Piers 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.

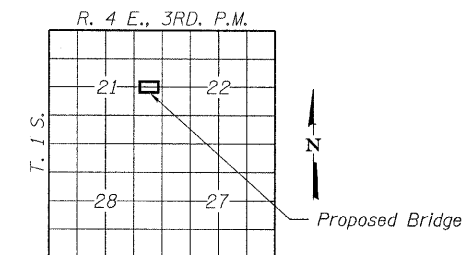
INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. Riprap Details
3. 17"x48" PPC Deck Beam - Spans 1 & 3
4. 17"x48" PPC Deck Beam Details - Spans 1 & 3
5. 17"x48" PPC Deck Beam - Span 2
6. 17"x48" PPC Deck Beam Details - Span 2
7. Superstructure Details
8. Steel Railing, Type S1
9. Abutments
10. Piers
11. HP Pile Details
12. Borings

HORSE CREEK
BUILT 201 BY
JEFFERSON COUNTY
SEC. 09-06122-00-BR
FARRINGTON ROAD DISTRICT
STR. NO. 041-3748
LOADING HL-93

NAME PLATE

See Std. 515001



LOCATION SKETCH

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

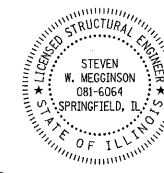
Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.284g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.680g
Soil Site Class = D

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	444.7	429.0	429.0	444.7

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 M. Meigs
2/23/2012
ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-2012

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			460
Stone Dumped Riprap, Class A4	Ton			360
Removal of Existing Structures No. 2	Each			1
Cofferdam (Type 1) (Location 1)	Each			1
Cofferdam (Type 1) (Location 2)	Each			1
Concrete Structures	Cu. Yd.		42.8	42.8
Concrete Encasement	Cu. Yd.		14.8	14.8
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	2,400		2,400
Reinforcement Bars	Pound		4,300	4,300
Steel Railing, Type S1	Foot	205		205
Furnishing Steel Piles HP10x42	Foot		336	336
Driving Piles	Foot		160	160
Name Plates	Each		1	1
Setting Piles in Rock	Each		8	8