

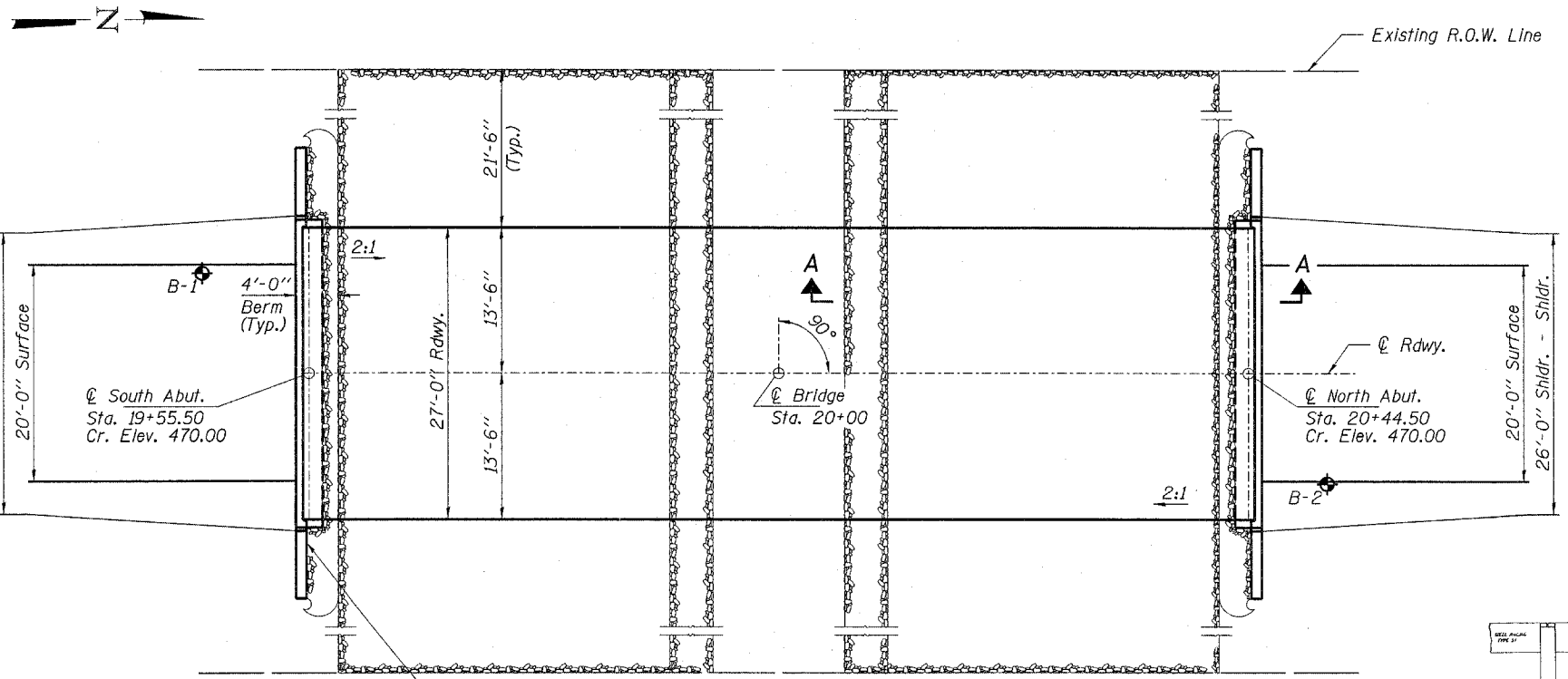
ELEVATION

GENERAL NOTES

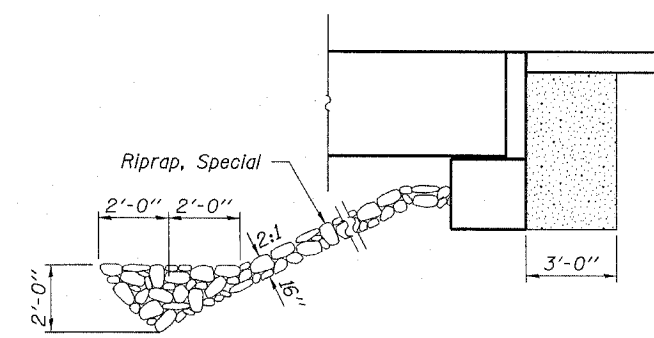
Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at North Abutment or approved by the Engineer before ordering the remainder of piles. Reinforcement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

HORSE CREEK
BUILT 200 BY
JEFFERSON COUNTY
SEC. 95-00158-00-BR
F.A. PROJ. BRS-789(113)
STR. NO. 041-3736
LOADING HS-20

NAME PLATE
See Std. 515001

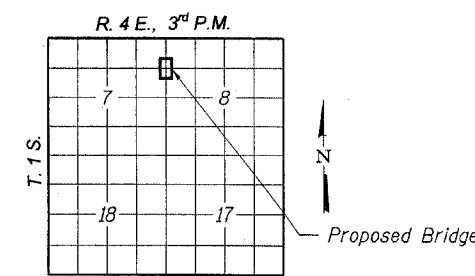


PLAN

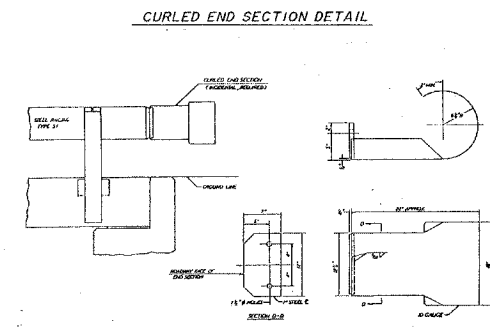


SECTION A-A

Note: See Special Provisions for Riprap, Special.



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
f's = 270,000 psi (1/2" low lax. strands)
f'si = 201,960 psi (1/2" low lax. strands)
fy = 60,000 psi (Reinf.)

Loading HS 20-44
Design Specifications: 2002 AASHTO & all applicable interims.
50#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

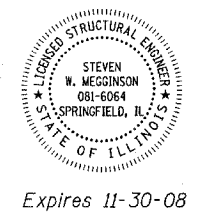
Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.095g
Site Coefficient (S) = 1.5

WATERWAY INFORMATION

Drainage Area = 26.8 Sq. Mi.		Low Grade Elev. 466.90 @ Sta. 20+00				
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Natural H.W.E.	Head - Ft.	Headwater El.
Design	25	3243	607	575	462.5	0.0
Base	100	3949	607	575	462.8	0.1
Overtopping						
Max. Calc.						

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 Standard Specifications for Highway Bridges".

Steven W. Meigs 1-11-07
ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-08

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Riprap, Special	Ton			470
Hot-Mix Asphalt Surface Course, Mix "C", N50	Ton			37
Concrete Structures	Cu. Yd.		24.2	24.2
Concrete Encasement	Cu. Yd.		3.4	3.4
Precast Prestressed Concrete Deck Beams (42" Depth)	Sq. Ft.	2,435		2,435
Stud Shear Connectors	Each		40	40
Reinforcement Bars	Pound		3,440	3,440
Steel Railing, Type S1	Foot	189		189
Steel Piles HP12x53	Foot		945	945
Test Pile Steel HP12x53	Each		1	1
Name Plates	Each		1	1
Controlled Low-Strength Material	Cu. Yd.			25

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-49-0007-1 DATE: 01/12/07
DESIGNED: R.J.P. CHECKED: S.W.M. DRAWN: D.T.M.

GENERAL PLAN AND ELEVATION

SECTION 95-00158-00-BR

C.H. 3 / F.A.S. 789

JEFFERSON COUNTY

STRUCTURE NO. 041-3736 / STATION 20+00