

GENERAL NOTES

See Proposal Booklet for Boring data.

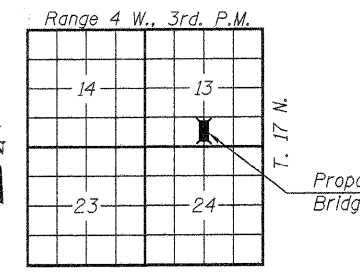
Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60.

The Contractor shall drive one steel HP10x42 test pile to 110% of the nominal required bearing in a permanent location at each abutment and at each Pier as directed by the Engineer, before ordering the remainder of piles.

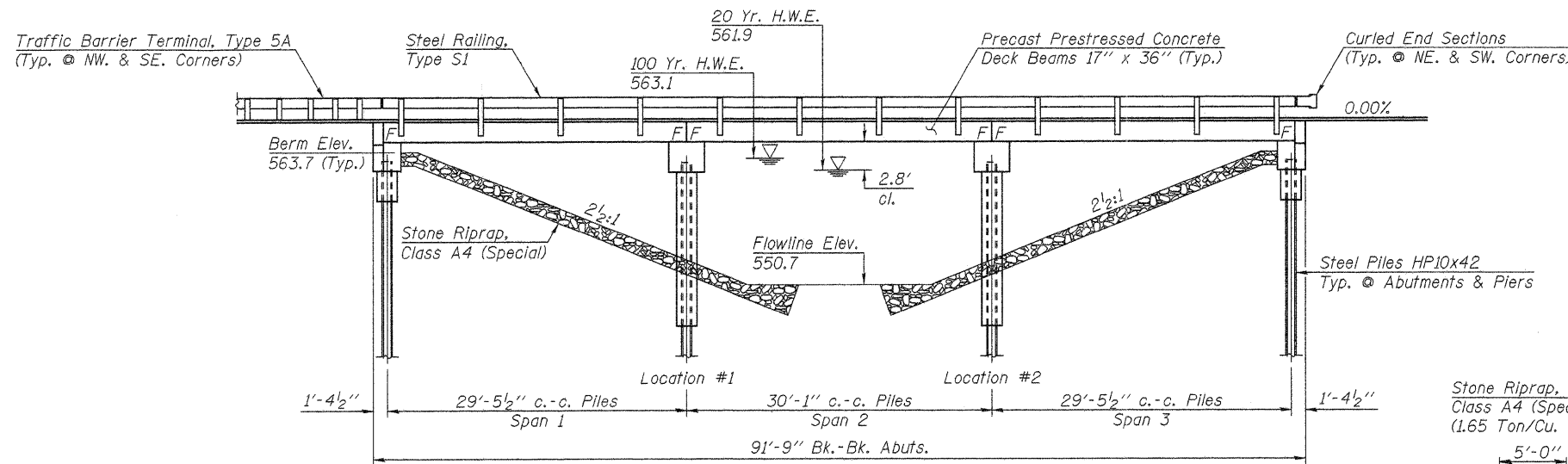
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Structure Excavation will not be measured for payment but shall be included in the unit price bid for "Concrete Structures" or "Concrete Encasement."

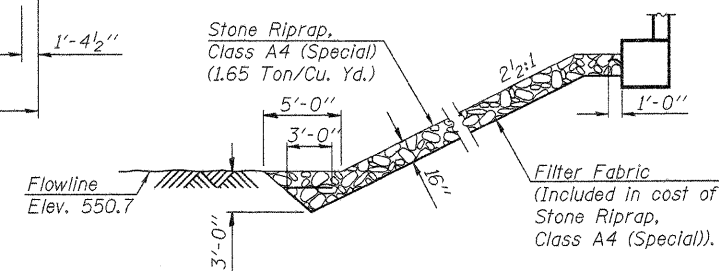
All exposed portions of abutments, wing walls, and piers shall receive a rubbed finish in accordance with Article 503.15 (b) of the Standard Specifications. Cost to be included in cost of Concrete Structures.



LOCATION PLAN



ELEVATION



SECTION A-A

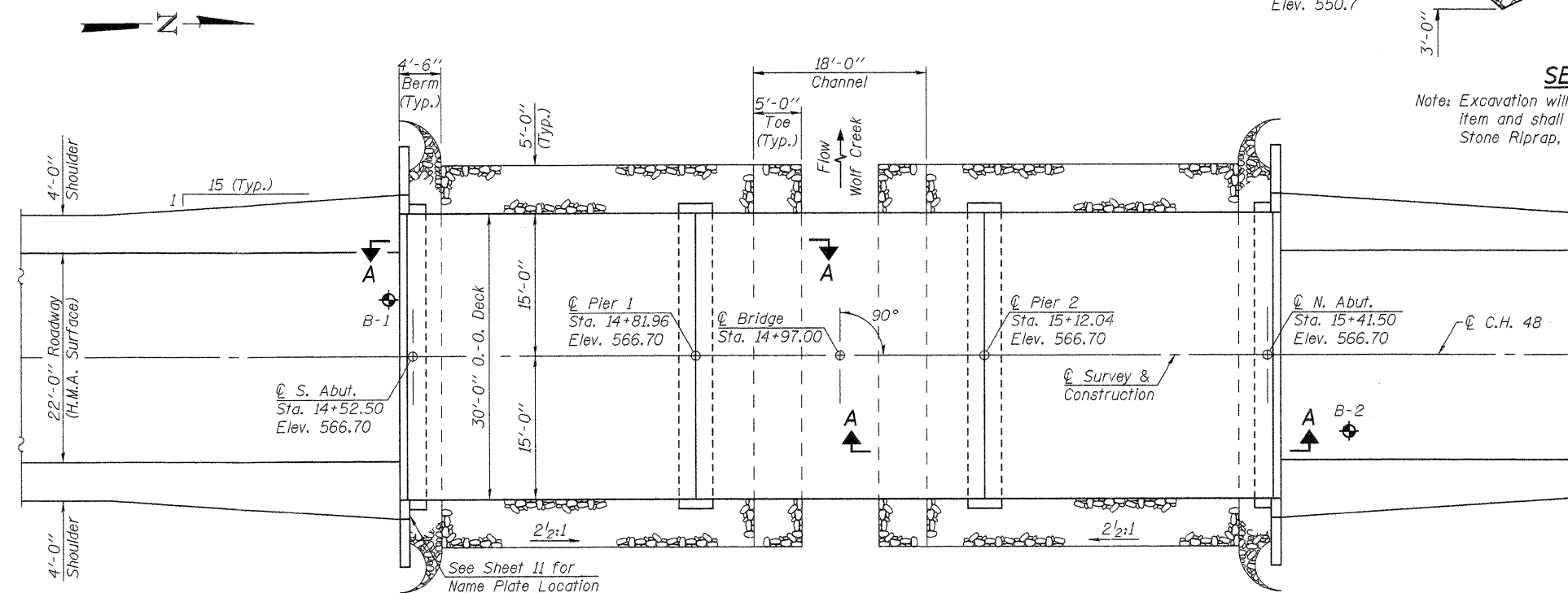
Note: Excavation will not be paid for as a separate item and shall be considered as included in Stone Riprap, Class A4 (Special).

**WOLF CREEK
BUILT 20__ BY
SANGAMON COUNTY
SEC. 08-00095-00-BR
COUNTY HIGHWAY 48
F.A. PROJ. BROS 0167(065)
STR. NO. 084-3443 LOADING HL-93**

LETTERING FOR NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	2,700		2,700
Concrete Structures	Cu. Yd.		51.8	51.8
Reinforcement Bars	Pound		7,010	7,010
Steel Railing, Type S1	Foot	180		180
Name Plates	Each		1	1
Furnishing Steel Piles HP10x42	Foot		544	544
Driving Piles	Foot		544	544
Test Pile, Steel HP10x42	Each		4	4
Stone Riprap, Class A4 (Special)	Ton		289	289
Concrete Encasement	Cu. Yd.		21.0	21.0
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Hot-Mix Asphalt Surface Course, Mix "C", N50	Ton	28		28
Portland Cement Mortar Fairing Course	Foot	608		608
Waterproofing Membrane System	Sq. Yd.	301		301



PLAN

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Abut.	Pier 1	Pier 2	N. Abut.
	558.9	538.7	538.7	558.9

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.146
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.255
Soil Site Class = D

WATERWAY INFORMATION

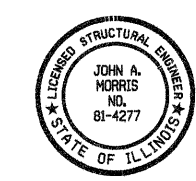
Drainage Area 6.31 Sq. Mi.
Existing Opening (20 Yr.) 365 Sq. Ft.
Required Opening (20 Yr.) 479 Sq. Ft.
Proposed Opening (20 Yr.) 479 Sq. Ft.
Design Discharge (20 Yr.) 1,390 C.F.S.
Created Head (20 Yr.) 0.1 Ft.
100 Year Discharge 2,160 C.F.S.
100 Yr. Created Head 0.2 Ft.

DESIGN STRESSES

f_c = 6,000 p.s.i. (Prestressed Beams)
f_{el} = 5,000 p.s.i. (Prestressed Beams)
f_s = 270,000 p.s.i. (Prestressed Strands)
f_{sl} = 201,960 p.s.i. (Prestressed Strands)
f_c = 3,500 p.s.i. (Concrete -- Field Units)
f_y = 60,000 p.s.i. (Reinf. Bars)
LOADING HL-93
Design Specifications: 2010 AASHTO LRFD & Interims
50#/Sq. Ft. included in dead load for future wearing surface.

"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 Bridge Design Specifications'."

John A. Morris 4/27/11
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/12)



**GENERAL PLAN & ELEVATION
COUNTY HIGHWAY 48
SECTION 08-00095-00-BR
SANGAMON COUNTY
STATION 14+97.00
S.N. 084-3443**

FILE NAME = 10-273.GPE.DGN	USER NAME = S.A.P.	DESIGNED - A.L.S.	REVISED -	<p>FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL</p>	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = XXX	CHECKED - A.R.K.	REVISED -		48	08-00095-00-BR	SANGAMON	18	5
	PLOT DATE = 04/19/11	DRAWN - S.A.P.	REVISED -		CONTRACT NO. 084-3443				
		CHECKED - A.L.S. & A.R.K.	REVISED -		ILLINOIS FED. AID PROJECT				