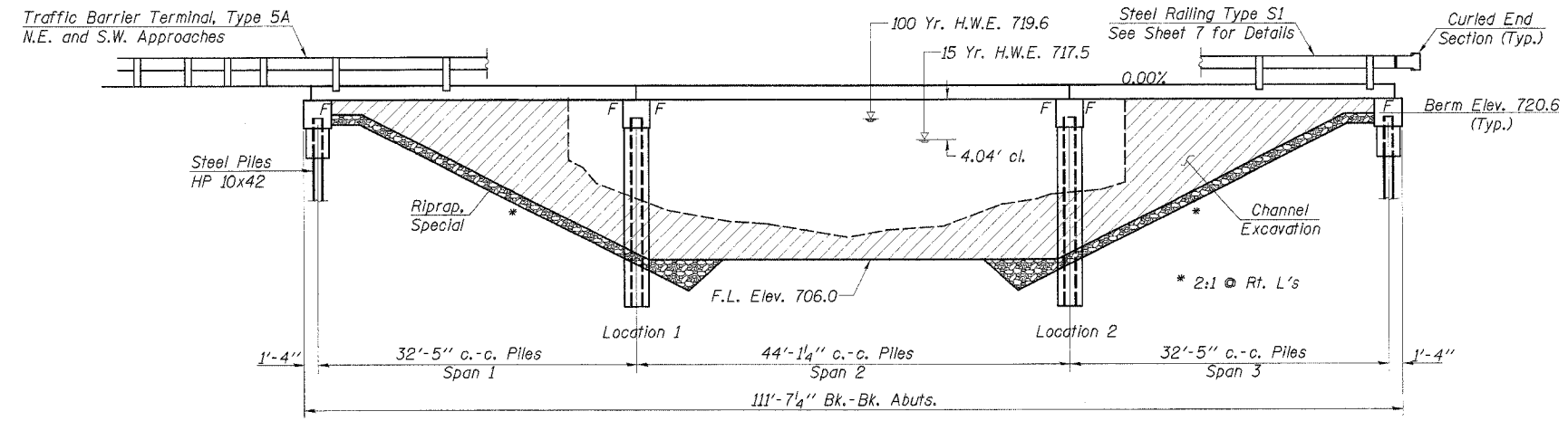
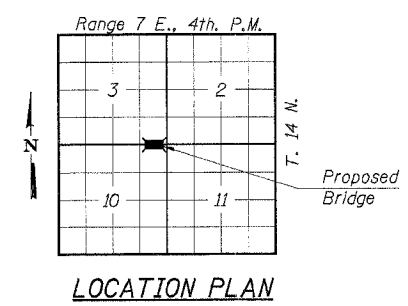


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 20	04-00153-00-BR	STARK	13	4

ILLINOIS  
CONTRACT NO. 89364



**ELEVATION**



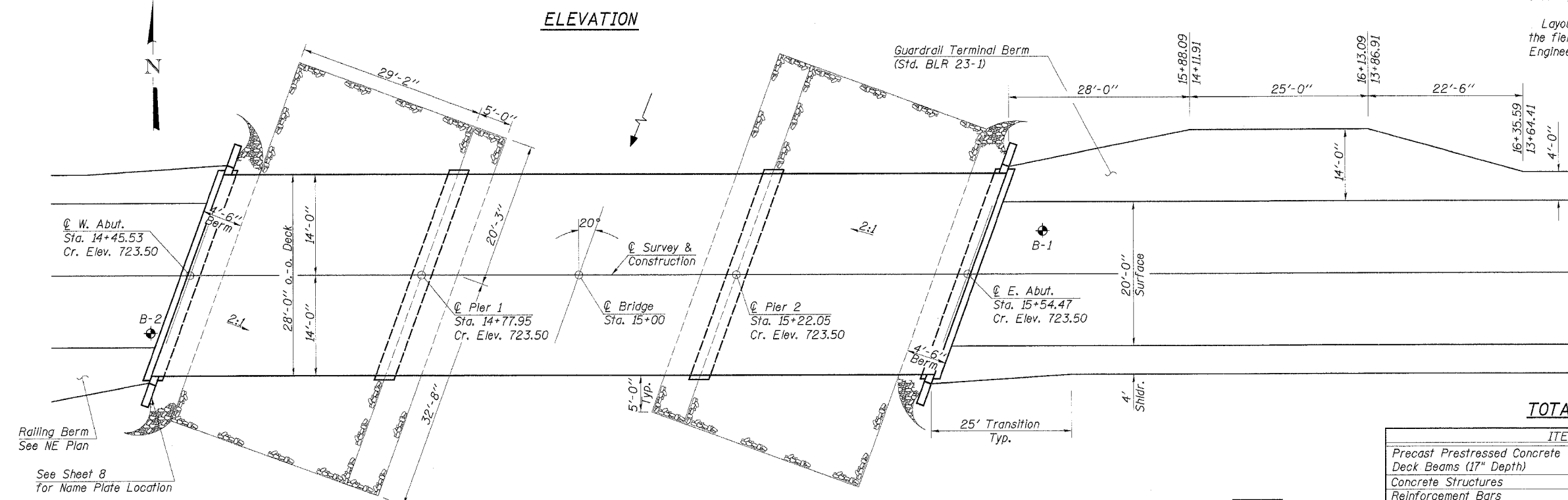
**LOCATION PLAN**

**GENERAL NOTES**

See Proposal for Boring Data.  
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.  
The Contractor shall drive one steel test pile in a permanent location at the West abutment and at Pier #2 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.

SILVER CREEK  
BUILT 200\_ BY  
STARK COUNTY  
FAS RTE. 208 (C.H. RTE. 20)  
SEC. 04-00153-00-BR  
PROJ. NO. BRS-208(102)  
STR. NO. 088-3408 LOADING HS20

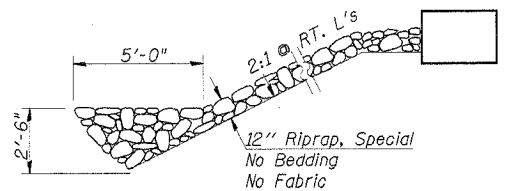
**LETTERING FOR NAME PLATE**  
See Std. 515001



**PLAN**

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	3080		3080
Concrete Structures	Cu. Yd.		39.4	39.4
Reinforcement Bars	Pound		4410	4410
Steel Railing, Type S1	Foot	225		225
Name Plates	Each		1	1
Steel Piles HP 10x42	Foot		832	832
Test Pile Steel HP 10x42	Each		2	2
Riprap, Special	Ton		271	271
Concrete Encasement	Cu. Yd.		28.4	28.4
Underwater Structure Excavation Protection Location 1	Each		1	1
Underwater Structure Excavation Protection Location 2	Each		1	1
Bit. Conc. Surf. Cse., Mix "C", N50	Ton	62		62
Waterproofing Membrane System	Sq. Yd.	343		343
P.C. Mortar Fairing Course	Foot	330		330



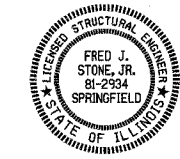
**STONE RIPRAP ANCHOR DETAIL**

**DESIGN STRESSES**

$f_c = 5,000$  p.s.i. (Prestressed Beams)  
 $f_{ci} = 4,000$  p.s.i. (Prestressed Beams)  
 $f_a = 1,400$  p.s.i. (Concrete)  
 $f_s = 270,000$  p.s.i. (Prestressed Strands)  
 $f_{si} = 201,960$  p.s.i. (Prestressed Strands)  
 $f_b = 24,000$  p.s.i. (Reinf. Bars -- Field Units)  
 $f_y = 60,000$  p.s.i. (Reinf. Bars -- Field Units)  
 $n = 9$  (Concrete)  
LOADING HS20-44  
Design Specifications: 2002 AASHTO  
25#/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 Standard Specifications for Highway Bridges'."

Fred J. Stone, Jr. (8-12-05)  
ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/06)



Construction Permits:  
The requirements of the IDNR - Office of Water Resources have been fulfilled in accordance with Statewide Permit No. 2.

**WATERWAY INFORMATION**

Drainage Area	12.19 Sq. Mi.
Existing Opening (15 Yr.)	464 Sq. Ft.
Required Opening (15 Yr.)	634 Sq. Ft.
Proposed Opening (15 Yr.)	634 Sq. Ft.
Design Discharge (15 Yr.)	1775 C.F.S.
Created Head (15 Yr.)	0.1 Ft.
100 Year Discharge	3070 C.F.S.
100 Yr. Created Head	0.2 Ft.

DESIGNED	SFM
CHECKED	FJS
DRAWN	SAP & JPS
CHECKED	SFM

**GENERAL PLAN & ELEVATION**

COUNTY HIGHWAY 20  
SECTION 04-00153-00-BR  
STARK COUNTY  
STATION 15+00

4440 ASH GROVE  
SPRINGFIELD, IL 62711  
(217) 793-8500  
ossinc@tamvid.com

**OZYURT AND STONE, INC.**  
CONSULTING ENGINEERS

JOB NO.: 0414  
FILE: GPE.DGN  
DATE: 08/12/05