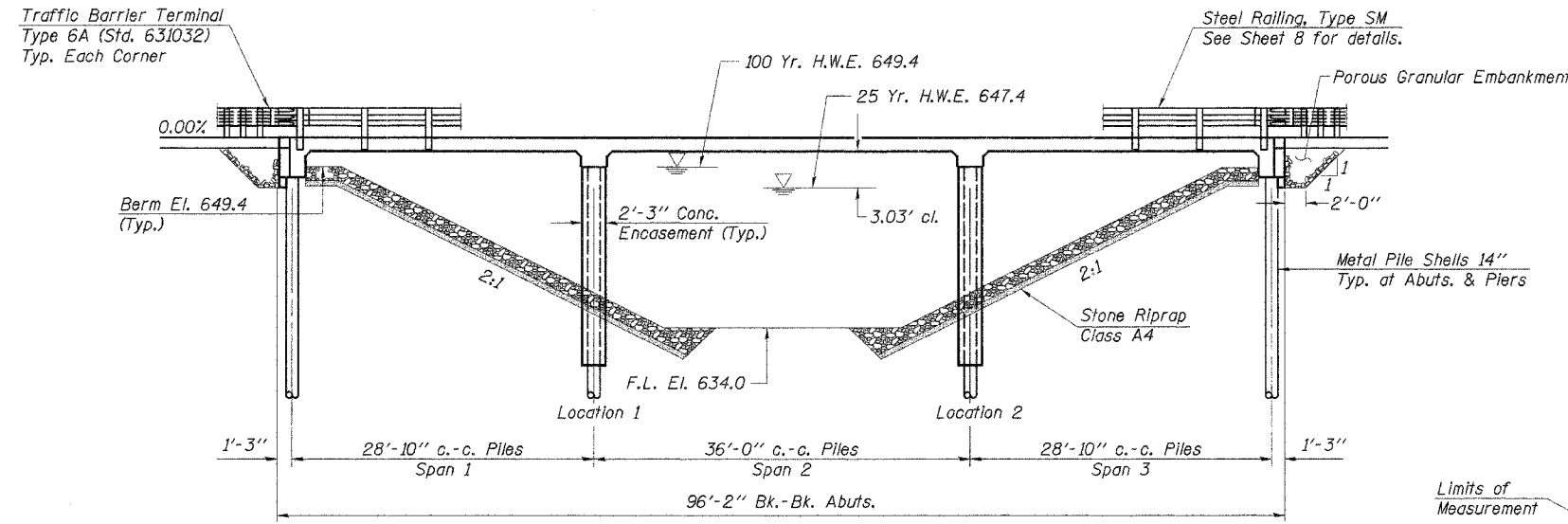
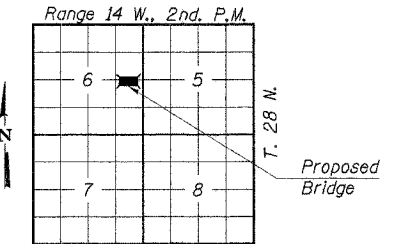


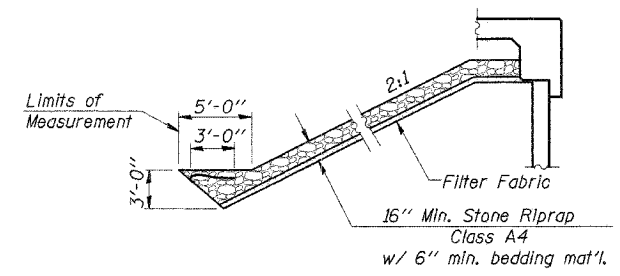
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 4	04-00034	IROQUOIS	16	6
F.A.S. 321	-04-BR			
ROAD DIST.	ILLINOIS	PROJ. NO. BRS-321(113)		
CONTRACT NO. 87299				



ELEVATION



LOCATION PLAN



SECTION A-A

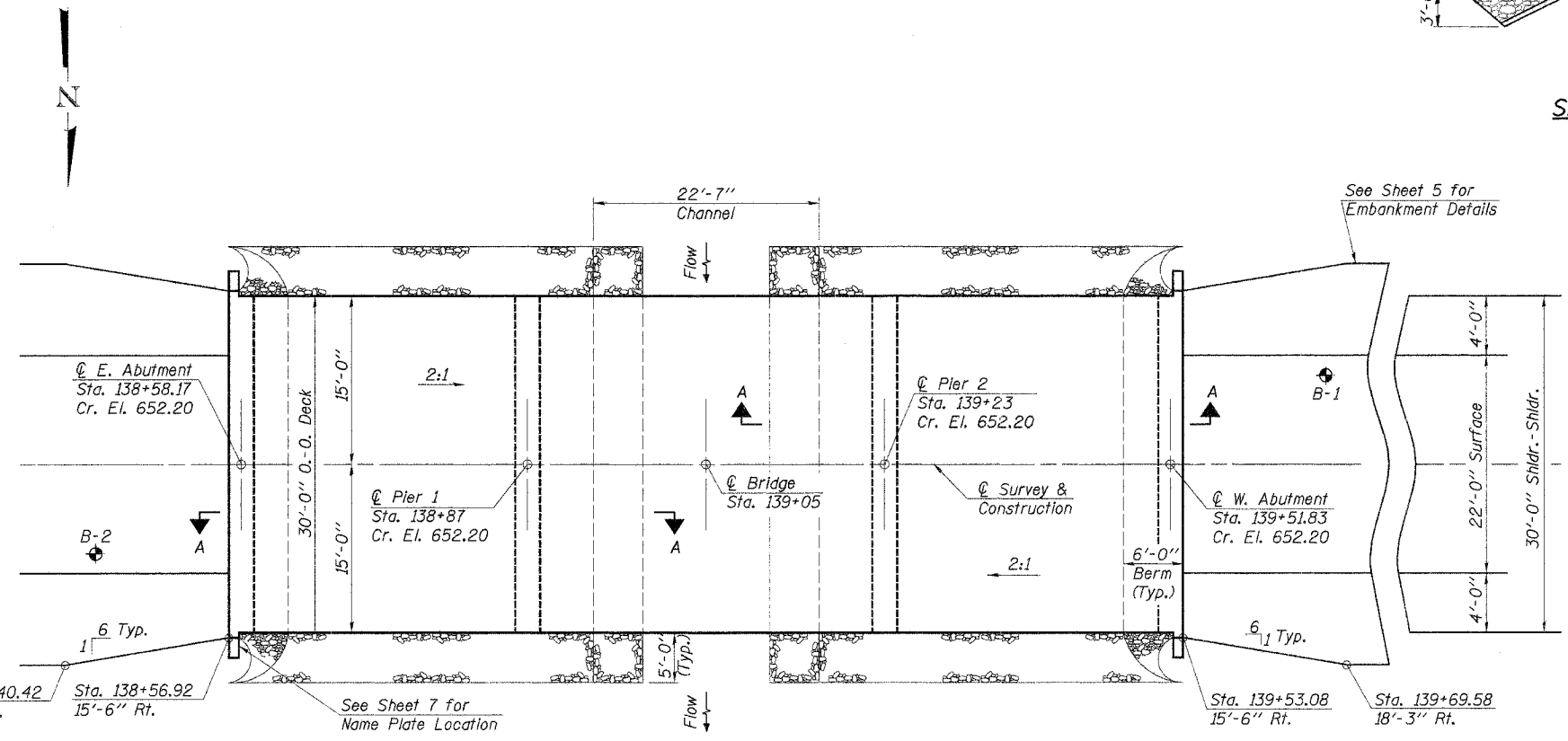
GENERAL NOTES

See sheets 10 & 11 for Boring data.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 (IL Modified). See Special Provisions.

The Contractor shall drive one metal shell test pile in a permanent location at the West abutment and at Pier #1 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.



PLAN

Note: The requirements of the IDNR-Division of Water Resources have been fulfilled in accordance with Statewide Permit No. 12.

LANGAN CREEK
BUILT 200_ BY
IROQUOIS COUNTY
SEC. 04-00034-04-BR
F.A.S. RTE. 321 C.H. RTE. 4
F.A. PROJ. BRS-321(113)
STR. NO. 038-3607 LOADING HS20

LETTERING FOR NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Superstructure	Cu. Yd.	167.4		167.4
Reinforcement Bars, Epoxy Coated	Pound	35,250		35,250
Steel Railing, Type SM	Foot	193		193
Name Plates	Each		1	1
Metal Shell Piles 14"	Foot		766	766
Test Pile Metal Shells	Each		2	2
Stone Riprap, Class A4	Ton			270
Filter Fabric	Sq. Yd.			359
Concrete Encasement	Cu. Yd.			20.5
Porous Granular Embankment	Ton		64	64
Protective Coat	Sq. Yd.	320		320
Bridge Deck Grooving	Sq. Yd.	299		299
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1

WATERWAY INFORMATION

DESIGNED	S.F.M.
CHECKED	F.J.S. & A.R.K.
DRAWN	S.A.P. & J.P.S.
CHECKED	S.F.M. & A.R.K.

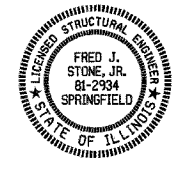
Drainage Area	41.66 Sq. Mi.
Existing Opening (25 Yr.)	529 Sq. Ft.
Required Opening (25 Yr.)	613 Sq. Ft.
Proposed Opening (25 Yr.)	613 Sq. Ft.
Design Discharge (25 Yr.)	1331 C.F.S.
Created Head (25 Yr.)	0.0 Ft.
100 Year Discharge	1668 C.F.S.
100 Yr. Created Head	0.0 Ft.

DESIGN STRESSES

$f_c = 3,500$ p.s.i. (Concrete)
 $f_y = 60,000$ p.s.i. (Reinf. Bars)
 $n = 9$ (Concrete)
 LOADING HS20-44
 Design Specifications: 2002 AASHTO & Interim 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. (12-0-05)
 ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/08)



GENERAL PLAN & ELEVATION
 COUNTY HIGHWAY 4
 SEC. 04-00034-04-BR
 IROQUOIS COUNTY
 STATION 139+05