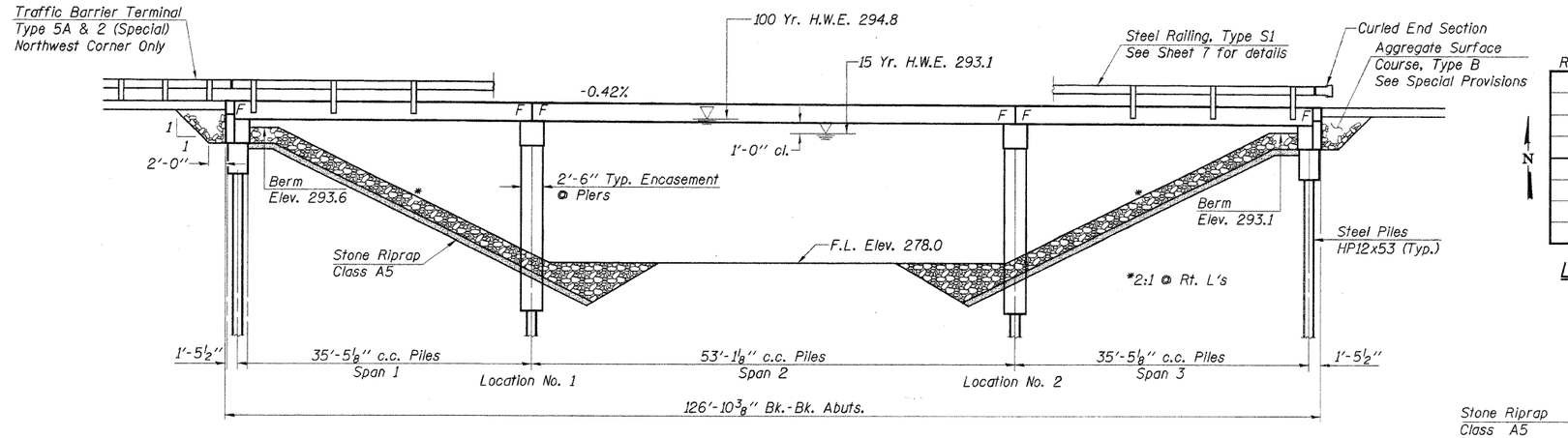
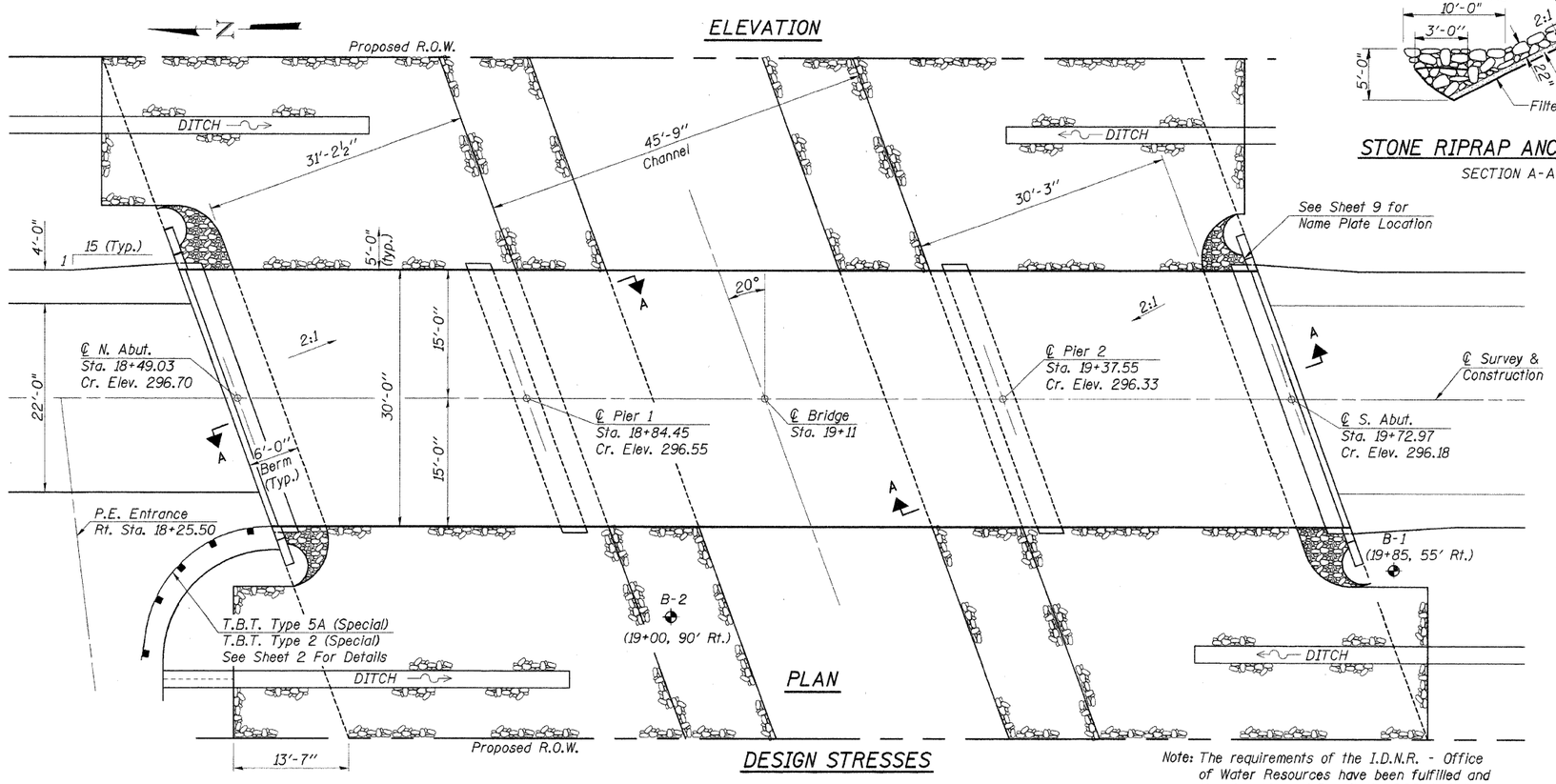
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 146	03-00295 -00-BR	IROQUOIS	16	4
ROAD DIST.	ILLINOIS	VILLAGE OF CISSNA PARK		

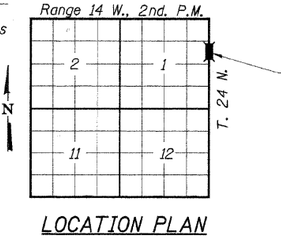
CONTRACT NO. 87312



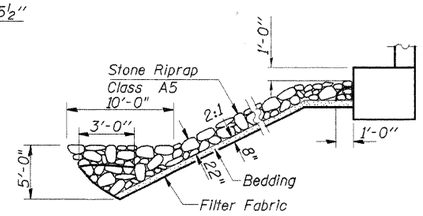
ELEVATION



PLAN



LOCATION PLAN



STONE RIPRAP ANCHOR DETAIL

SECTION A-A

GENERAL NOTES

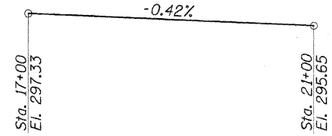
See sheet 11 for Boring data.

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

The Contractor shall drive one steel "H" test pile in a permanent location at the North 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.

Aggregate Surface Course, Ty. B shall be used to backfill behind each abutment as indicated by the Engineer. The additional quantity of CA-10 is included in the total quantity for Aggregate Surface Course, Ty. B. (See Special Provisions).



PROFILE GRADE

PIGEON CREEK
BUILT 200_ BY
VILLAGE OF CISSNA PARK
IROQUOIS COUNTY
SEC. 03-00295-00-BR
F.A. PROJ. BROS-075(93)
STR. NO. 038-6401 LOADING HS20

LETTERING FOR NAME PLATE

See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	3750		3750
Concrete Structures	Cu. Yd.		49.4	49.4
Reinforcement Bars	Pound		5560	5560
Steel Railing, Type S1	Foot		251	251
Name Plates	Each		1	1
Steel Piles HP12x53	Foot		955	955
Test Pile Steel HP12x53	Each		2	2
Stone Riprap, Class A5	Ton		945	945
Filter Fabric	Sq. Yd.		998	998
Concrete Encasement	Cu. Yd.		43.1	43.1
Aggregate Surface Course, Type B	Ton		74	74
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1

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

WATERWAY INFORMATION

Drainage Area	53.2 Sq. Mi.
Existing Opening (15 Yr.)	945 Sq. Ft.
Required Opening (15 Yr.)	1063 Sq. Ft.
Proposed Opening (15 Yr.)	1063 Sq. Ft.
Design Discharge (15 Yr.)	3027 C.F.S.
Created Head (15 Yr.)	0.0 Ft.
100 Year Discharge	4606 C.F.S.
100 Yr. Created Head	0.3 Ft.

DESIGN STRESSES

f'_c = 5,000 p.s.i. (Prestressed Beams)
f'_{ci} = 4,000 p.s.i. (Prestressed Beams)
f_c = 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_s = 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.

Note: The requirements of the I.D.N.R. - Office of Water Resources have been fulfilled and they have issued Permit No. DS2005007 for the construction of this project.

"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. 9-22-06
ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/08)

LICENSED STRUCTURAL ENGINEER
FRED J. STONE, JR.
81-2934
SPRINGFIELD
STATE OF ILLINOIS

GENERAL PLAN & ELEVATION

SECTION 03-00295-00-BR
VILLAGE OF CISSNA PARK
IROQUOIS COUNTY
STATION 19+11

4440 ASH GROVE
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FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

JOB NO.:	9709
FILE:	GPE.DGN
DATE:	06/14/05