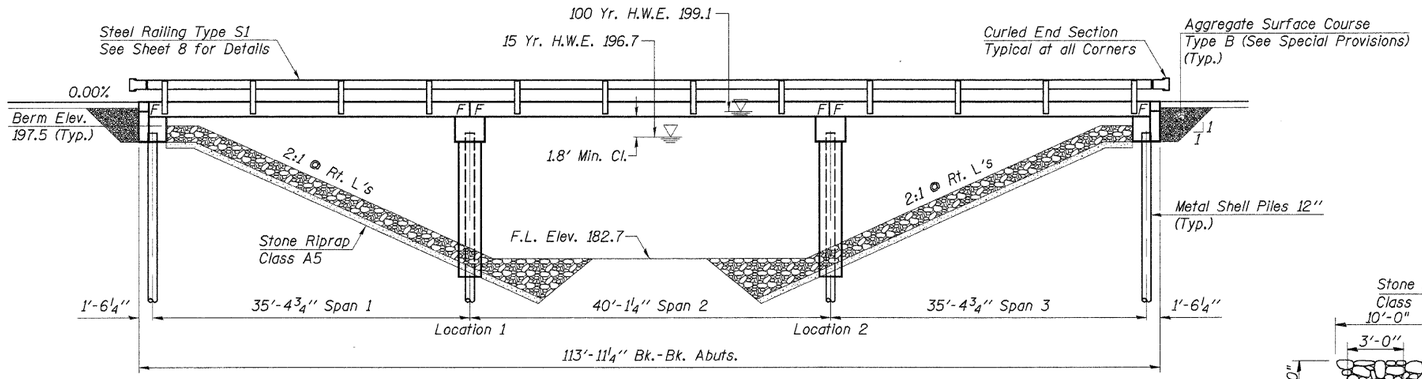
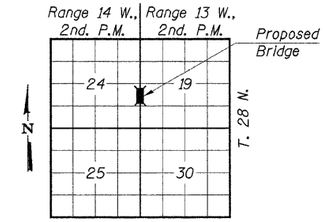
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 150	06-03122-00-BR	IROQUOIS	20	5
ASHKUM ROAD DIST.	ILLINOIS	BROS-075(133)		

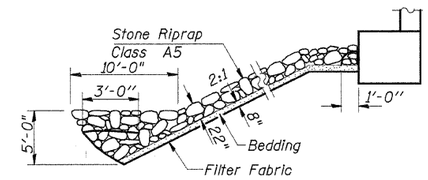
CONTRACT NO. 87362



ELEVATION



LOCATION PLAN



STONE RIPRAP ANCHOR DETAIL

SECTION A-A

GENERAL NOTES

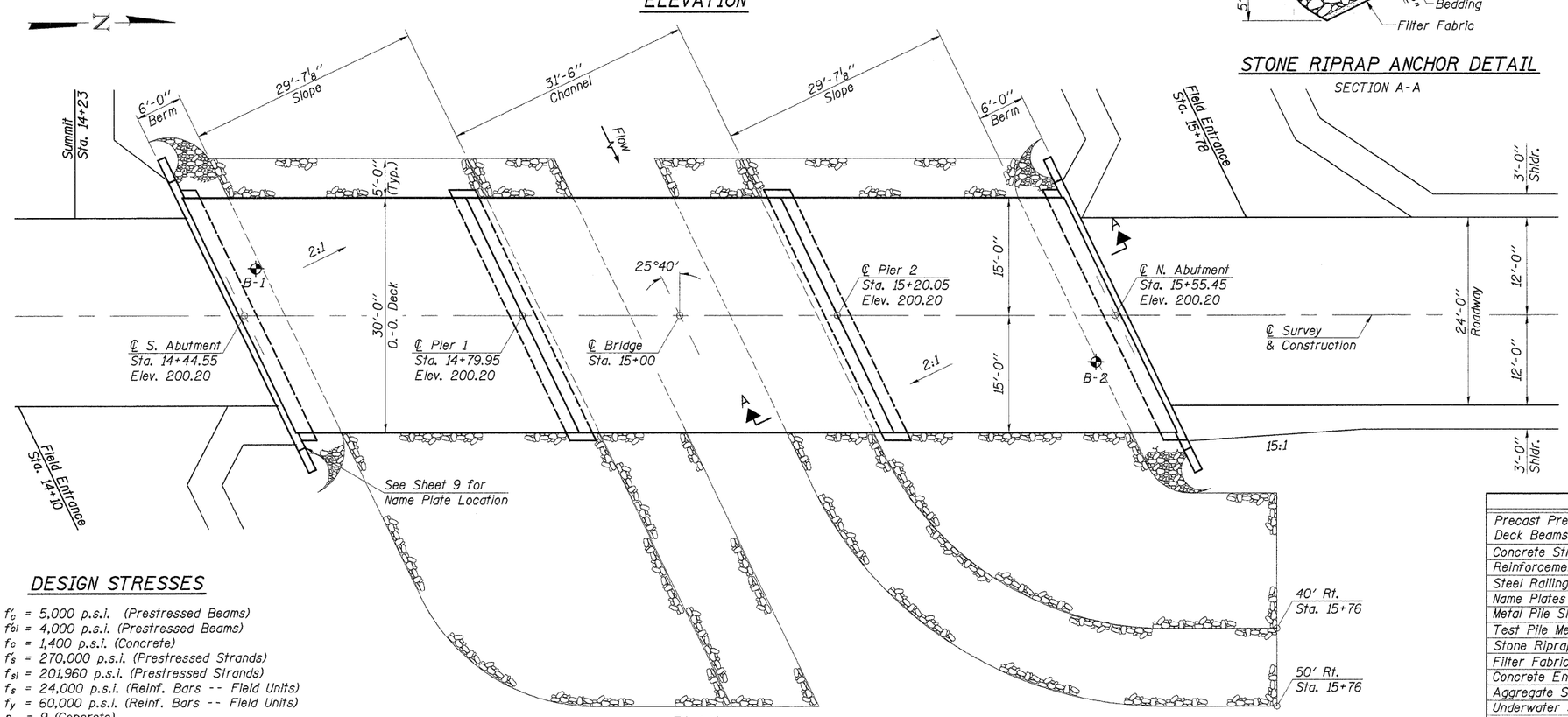
See Sheets 12 & 13 for Boring data.

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 South 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).



PLAN

PRAIRIE CREEK
BUILT 200_ BY
ASHKUM ROAD DISTRICT
IROQUOIS COUNTY
SEC. 06-03122-00-BR
F.A. PROJ. BROS-075(133)
STR. NO. 038-3258 LOADING HS20

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.	3,360		3,360
Concrete Structures	Cu. Yd.		50.3	50.3
Reinforcement Bars	Pound		5,290	5,290
Steel Railing, Type S1	Foot	225		225
Name Plates	Each		1	1
Metal Pile Shells 12"	Foot		972	972
Test Pile Metal Shell	Each		2	2
Stone Riprap, Class A5	Ton		890	890
Filter Fabric	Sq. Yd.		740	740
Concrete Encasement	Cu. Yd.		26.0	26.0
Aggregate Surface Course, Type B	Ton		27	27
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1

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.

WATERWAY INFORMATION

Drainage Area	31.75 Sq. Mi.
Existing Opening (15 Yr.)	496 Sq. Ft.
Required Opening (15 Yr.)	704 Sq. Ft.
Proposed Opening (15 Yr.)	704 Sq. Ft.
Design Discharge (15 Yr.)	1,561 C.F.S.
Created Head (15 Yr.)	0.0 Ft.
100 Year Discharge	2,479 C.F.S.
100 Yr. Created Head	0.1 Ft.

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

"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. (11-10-07)
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 06-03122-00-BR
ASHKUM ROAD DISTRICT
IROQUOIS COUNTY
STATION 15+00

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

JOB NO.: 46864
FILE: GPE.DGN
DATE: 11/08/07