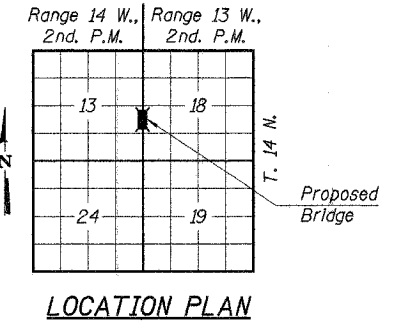


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 60	06-05132-00-BR	EDGAR	15	4
ROAD DIST.	ILLINOIS	EMBARRASS	CONTRACT NO. 91374	



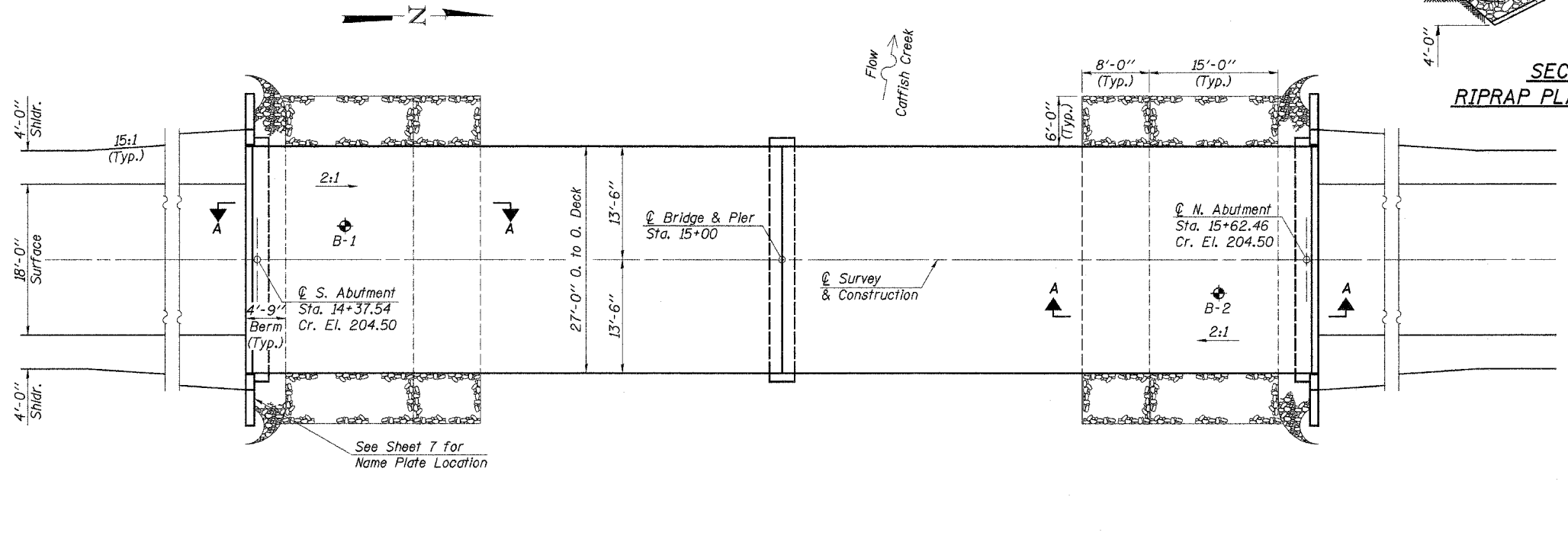
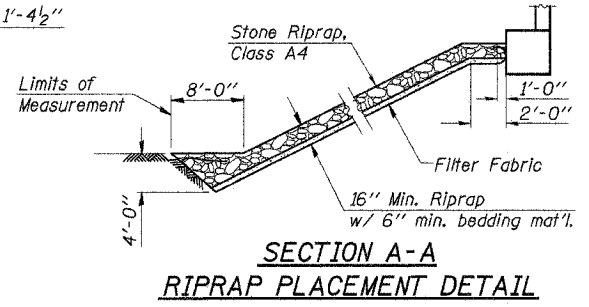
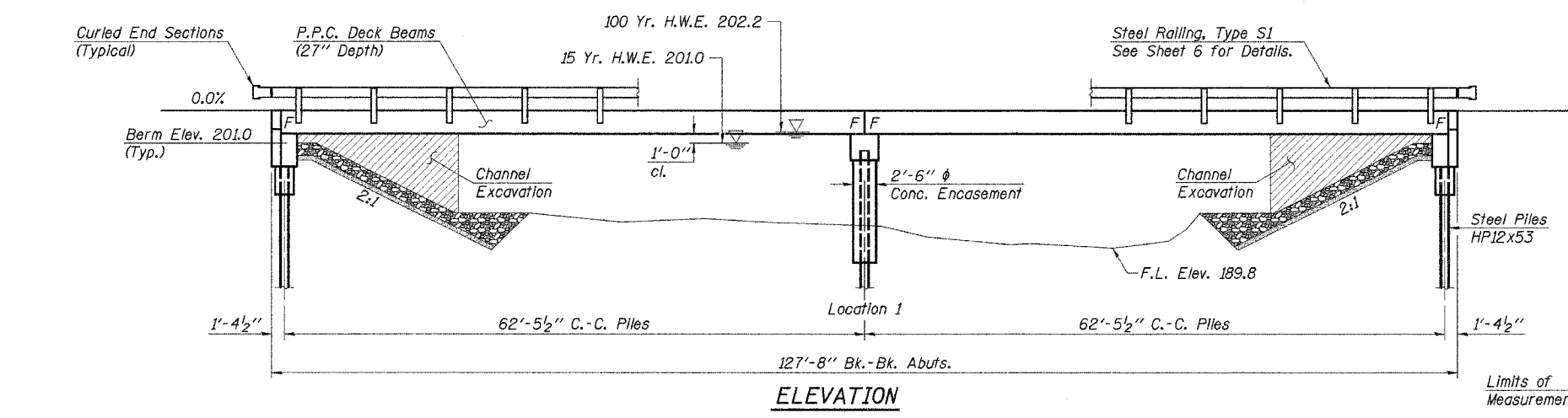
GENERAL NOTES

See Proposal Booklet 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 steel HP12x53 test pile in a permanent location at each Abutment and at the 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.



**CATFISH CREEK
BUILT 200_ BY
EMBARRASS ROAD DISTRICT
EDGAR COUNTY
SEC. 06-05132-00-BR
F.A. PROJ. BROS-045(41)
STR. NO. 023-4428 LOADING HS20**

LETTERING FOR NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	3,402		3,402
Concrete Structures	Cu. Yd.		39.6	39.6
Reinforcement Bars	Pound		4,130	4,130
Steel Railing, Type S1	Foot	253		253
Name Plates	Each		1	1
Steel Piles HP12x53	Foot		452	452
Test Pile Steel HP12x53	Each		3	3
Stone Riprap, Class A4	Ton		190	190
Filter Fabric	Sq. Yd.		240	240
Concrete Encasement	Cu. Yd.		20.7	20.7
Underwater Structure Excavation Protection - Location 1	Each		1	1

The requirements of the I.D.N.R. - Division of Water Resources have been fulfilled in accordance with Statewide Permit No. 2

PLAN

DESIGN STRESSES

f'_c = 5,000 p.s.i. (Prestressed Beams)
 f'_t = 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_{st} = 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.

"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.
 ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/08)



WATERWAY INFORMATION

Drainage Area	50.20 Sq. Mi.
Existing Opening (15 Yr.)	625 Sq. Ft.-Bridge 235 Sq. Ft.-Roadway
Required Opening (15 Yr.)	850 Sq. Ft.
Proposed Opening (15 Yr.)	850 Sq. Ft.
Design Discharge (15 Yr.)	3886 C.F.S.
Created Head (15 Yr.)	0.3 Ft.
100 Year Discharge	6028 C.F.S.
100 Yr. Created Head	0.6 Ft.

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

GENERAL PLAN & ELEVATION

SECTION 06-05132-00-BR
 EMBARRASS ROAD DISTRICT
 EDGAR COUNTY
 STATION 15+00

4440 ASH GROVE
 SPRINGFIELD, IL 62711
 (217) 793-8600
 www.fehr-graham.com

FEHR-GRAHAM & ASSOCIATES, LLC
 ENGINEERING AND SCIENCE CONSULTANTS
 PEPPERDILL, ROCKFORD, IL, ROCKFORD, IL, SPRINGFIELD, IL

JOB NO.: 46802
 FILE: 46802GPE.DGN
 DATE: 01/24/07