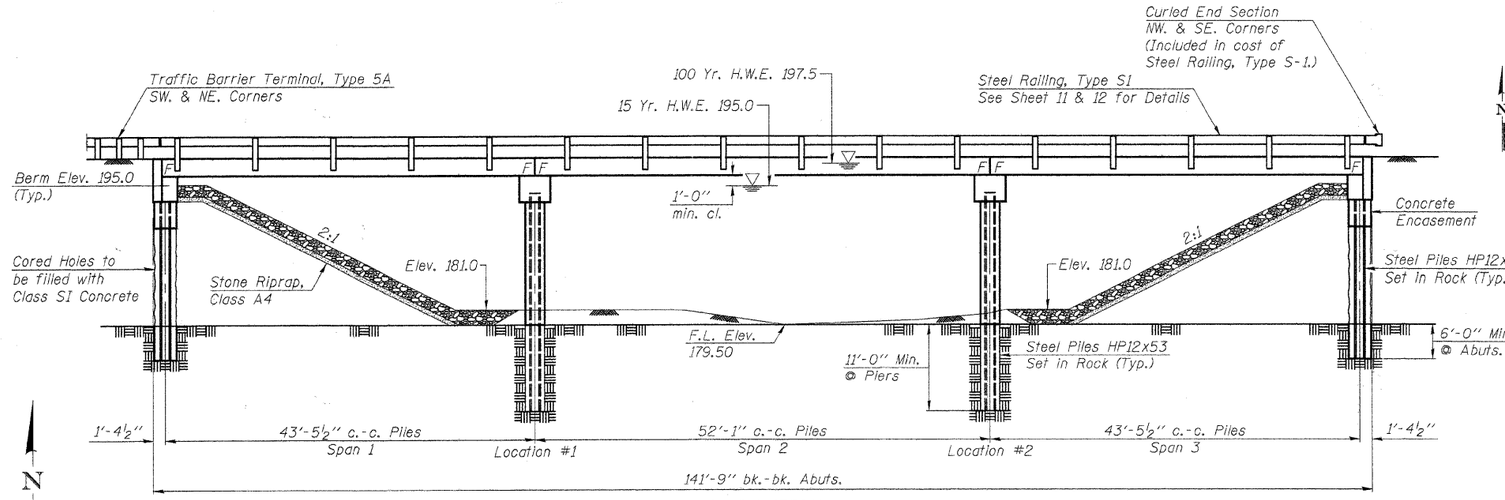
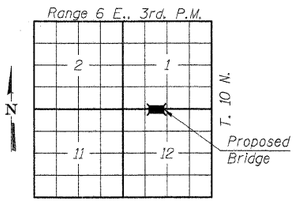


ELEVATION



LOCATION PLAN

GENERAL NOTES

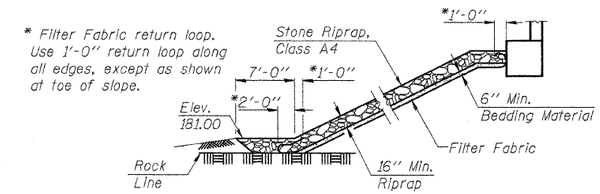
See Proposal Booklet for Boring data.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

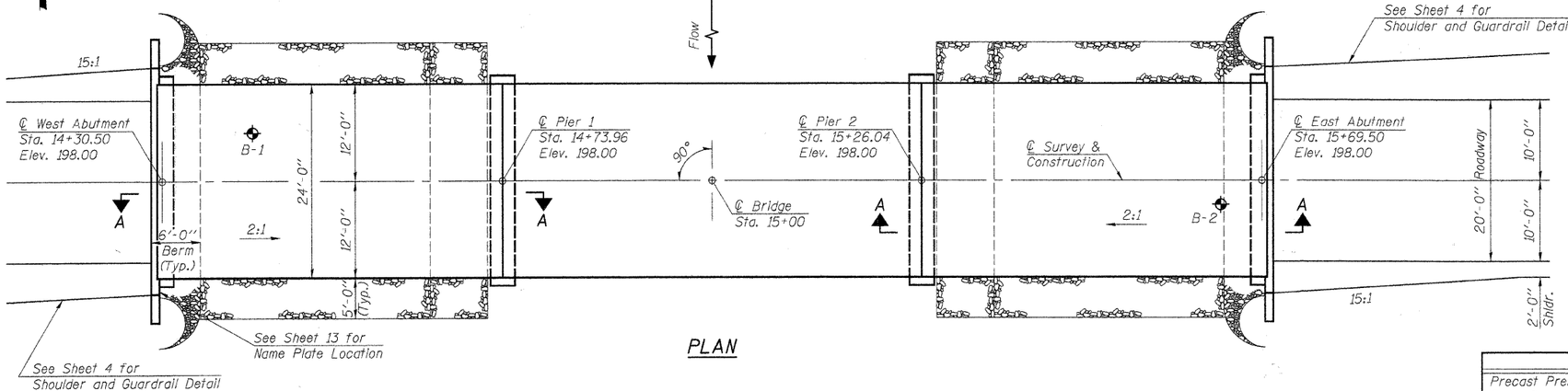
Structure Excavation will not be measured for payment but shall be included in the unit price bid for "Concrete Structures" or "Concrete Encasement."

All exposed portions of the abutments, wing walls, and piers shall receive a rubbed-finish in accordance with Article 503.15(b) of the Standard Specifications. Cost to be included in the cost of Concrete Structures.

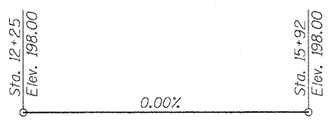


SECTION A-A
RIPRAP PLACEMENT DETAIL

Note: Excavation and aggregate bedding will not be paid for as separate items and shall be considered as included in Stone Riprap, Class A4.



PLAN



PROFILE GRADE

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.	3,360		3,360
Concrete Structures	Cu. Yd.		92.4	92.4
Reinforcement Bars	Pound		9,020	9,020
Steel Railing, Type S1	Foot	281		281
Name Plates	Each		1	1
Furnishing Steel Piles HP12x53	Foot		518	518
Setting Piles in Rock	Each		18	18
Stone Riprap, Class A4	Ton		237	237
Filter Fabric	Sq. Yd.		346	346
Concrete Encasement	Cu. Yd.		4.4	4.4
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1

LITTLE WABASH RIVER
BUILT 20__ BY
BIG SPRING ROAD DISTRICT
SHELBY COUNTY
SEC. 06-02119-00-BR
F.A. PROJ. BROS-173(175)
STR. NO. 087-3560 LOADING HL-93

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

WATERWAY INFORMATION

Drainage Area	57.55 Sq. Mi.
Existing Opening (15 Yr.)	1,008 Sq. Ft. (Bridge)
	322 Sq. Ft. (Roadway)
Required Opening (15 Yr.)	1,400 Sq. Ft.
Proposed Opening (15 Yr.)	1,400 Sq. Ft.
Design Discharge (15 Yr.)	6,953 C.F.S.
Created Head (15 Yr.)	0.5 Ft.
100 Year Discharge	11,022 C.F.S.
100 Yr. Created Head	1.0 Ft.
100 Yr. H.W.E.	197.5 Ft.

DESIGN STRESSES

f'_c = 6,000 p.s.i. (Prestressed Beams)
f'_{ci} = 5,000 p.s.i. (Prestressed Beams)
f'_s = 270,000 p.s.i. (Prestressed Strands)
f_{si} = 201,960 p.s.i. (Prestressed Strands)
f'_c = 3,500 p.s.i. (Concrete -- Field Units)
f_y = 60,000 p.s.i. (Reinf. Bars)
n = 8.5 (Concrete)
LOADING HL-93
Design Specifications: 2010 AASHTO LRFD & Interims
25#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.134g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.306g
Soil Site Class = C

"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'".

John A. Morris 4-5-11
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/12)

LICENSED STRUCTURAL ENGINEER
JOHN A. MORRIS
NO. 81-4277
STATE OF ILLINOIS

GENERAL PLAN & ELEVATION
SECTION 06-02119-00-BR
SHELBY COUNTY
STATION 15+00.00
S.N. 087-3560

FILE NAME = 46863U_GPE.DGN	USER NAME = S.A.P.	DESIGNED - J.A.M.	REVISED -
		CHECKED - S.F.M.	REVISED -
	PLOT SCALE =	DRAWN - S.A.P.	REVISED -
	PLOT DATE = 04/04/11	CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -

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

GENERAL PLAN & ELEVATION
S.N. 087-3560

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	5
		CONTRACT NO. 95657		
	ILLINOIS	BIG SPRING ROAD DISTRICT		

*46863