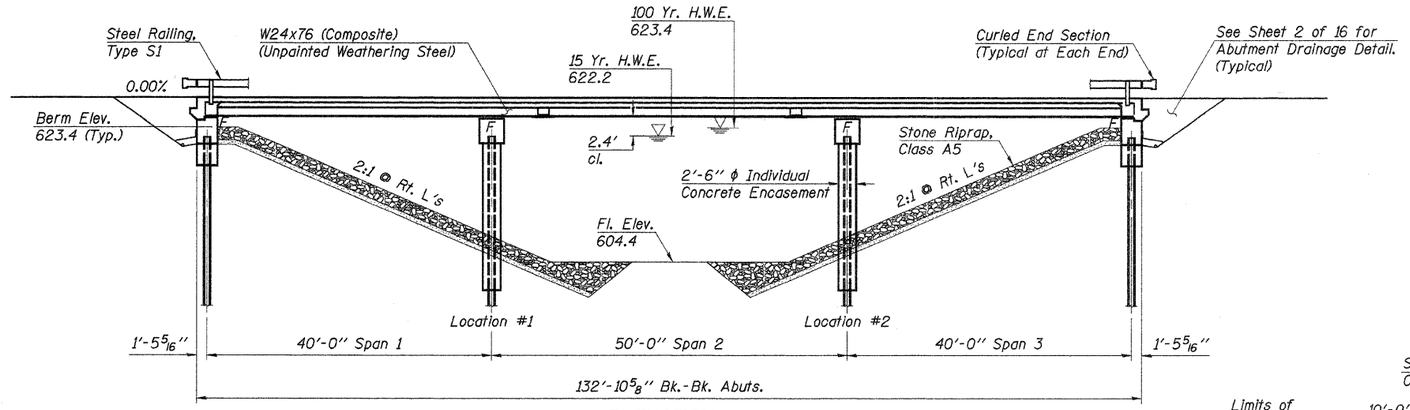
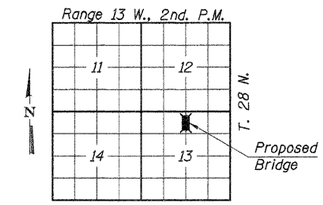
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 244	04-16101-02-BR	IROQUOIS	24	4
ROAD DIST.	ILLINOIS	MARTINTON		

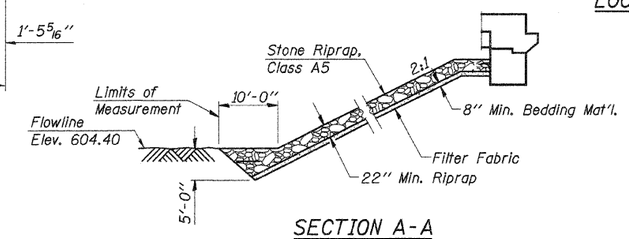
Sheet 1 of 16 Contract No. 87445



ELEVATION

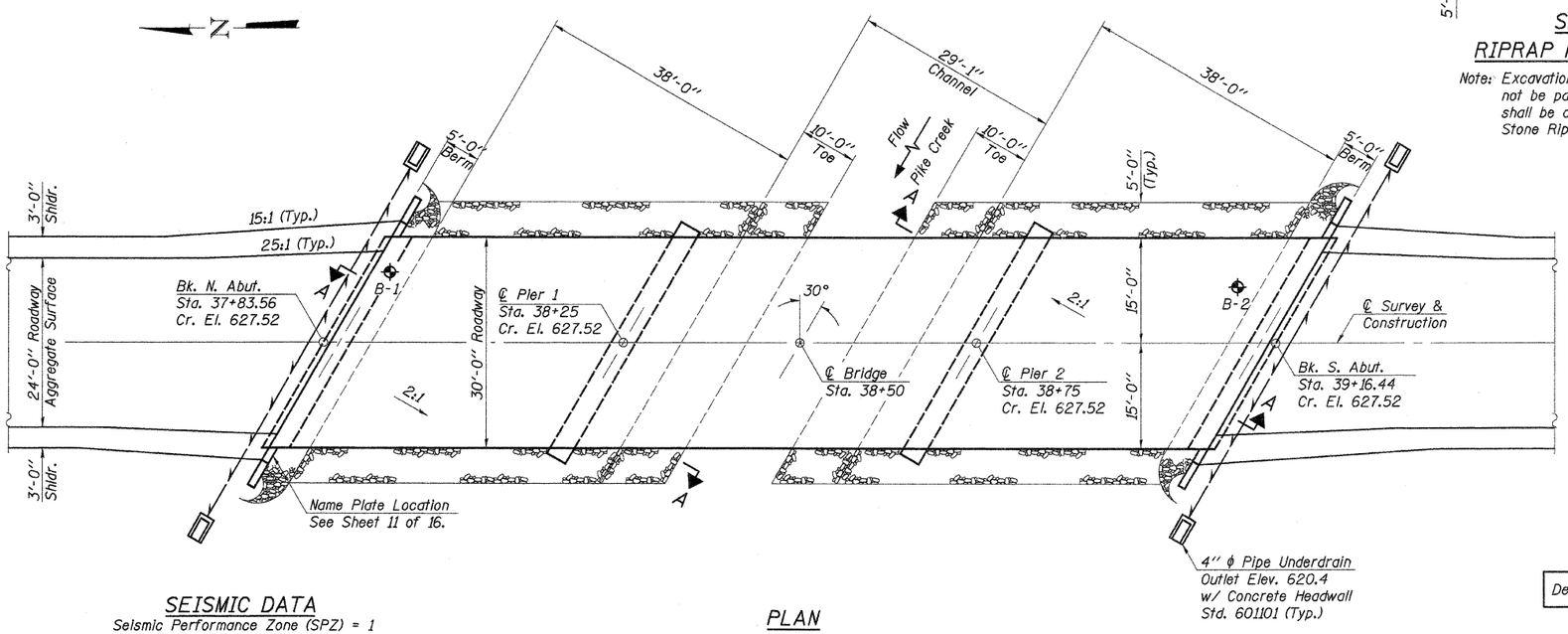


LOCATION PLAN



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 A5.



PLAN

INDEX OF SHEETS

1.	General Plan and Elevation
2.	General Notes, Bill of Materials & Miscellaneous Details
3.-4.	Top of Slab Elevations
5.-6.	Superstructure
7.	Steel Railing, Type S1
8.-9.	Structural Steel
10.	Bearing Details
11.	Abutments
12.	Piers
13.	Steel Pile Details
14.	Cantilever Forming Brackets
15.-16.	Soil Boring Logs

DESIGN SCOUR ELEVATION TABLE

Design Scour Elev. (Ft.)	N. Abut.	Pier 1	Pier 2	S. Abut.
	617.9	596.9	596.9	617.9

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.078g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.132g
Soil Site Class = C

WATERWAY INFORMATION

Drainage Area	68.72 Sq. Mi.
Existing Opening (15 Yr.)	906 Sq. Ft.
Required Opening (15 Yr.)	1,043 Sq. Ft.
Proposed Opening (15 Yr.)	1,043 Sq. Ft.
Design Discharge (15 Yr.)	2,610 C.F.S.
Created Head (15 Yr.)	0.1 Ft.
100 Year Discharge	4,270 C.F.S.
100 Yr. Created Head	0.2 Ft.

DESIGN STRESSES

f'_c = 3,500 p.s.i. (Concrete)
f_y = 60,000 p.s.i. (Reinf. Bars)
f_y = 50,000 p.s.i. (Structural Steel M270W Gr. 50)
n = 8.5 (Concrete)
LOADING HL-93
Design Specifications: 2007 AASHTO LRFD and Interims
50#/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 LRFD Bridge Design Specifications'".

John A. Morris 12-7-09
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/10)

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

DESIGNED -	A.R.K.
CHECKED -	A.L.S.
DRAWN -	S.A.P.
CHECKED -	A.R.K. & A.L.S.

GENERAL PLAN & ELEVATION
SECTION 04-16101-02-BR
MARTINTON ROAD DISTRICT
IROQUOIS COUNTY
STATION 38+50

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

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

JOB NO.:	48341
FILE:	GPE.DGN
DATE:	12/04/09