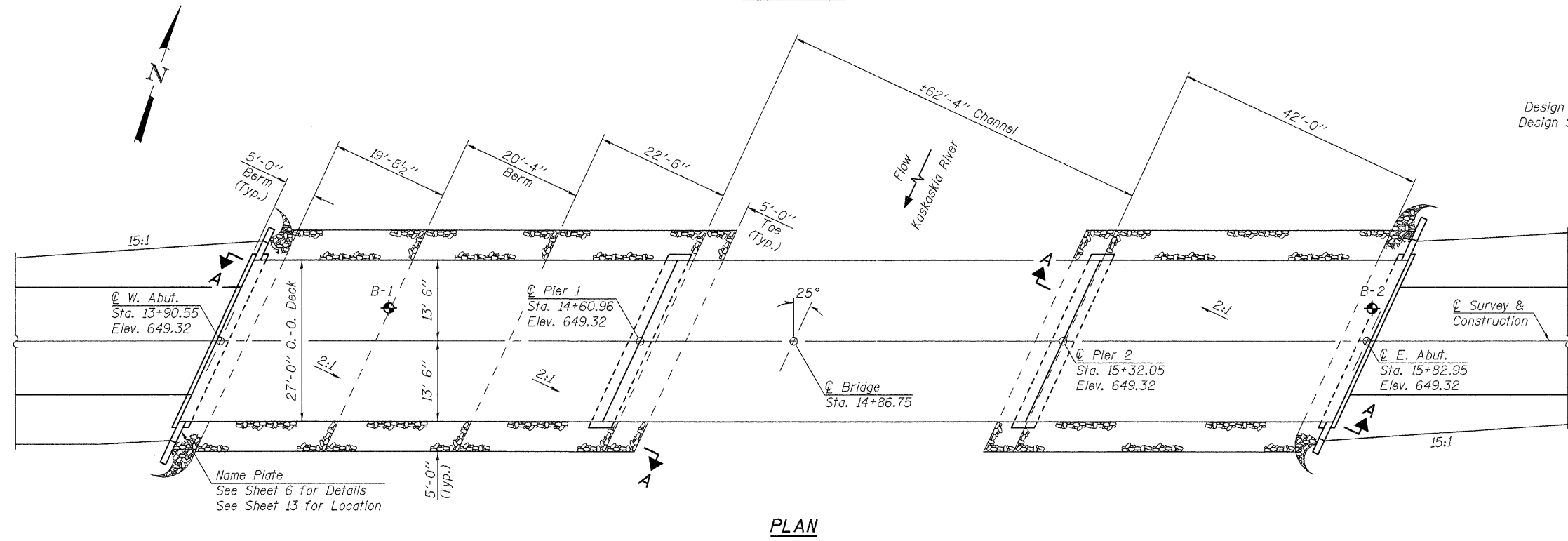


DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	643.9	614.8	614.8	643.9

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.114
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.232
Soil Site Class = C



Note: See Sheet 6 for Section A-A.

WATERWAY INFORMATION

Drainage Area	358.56 Sq. Mi.
Existing Opening (15 Yr.)	1,440 Sq. Ft.
Required Opening (15 Yr.)	1,948 Sq. Ft.
Proposed Opening (15 Yr.)	1,948 Sq. Ft.
Design Discharge (15 Yr.)	7,567 C.F.S.
Created Head (15 Yr.)	0.1 Ft.
100 Year Discharge	11,800 C.F.S.
100 Yr. Created Head	0.1 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)
 LOADING HL-93
 Design Specifications: 2010 AASHTO LRFD & 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 1-9-12
 ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/12)



GENERAL PLAN & ELEVATION
T.R. 151 OVER KASKASKIA RIVER
SECTION 07-02122-01-BR
DOUGLAS COUNTY
STATION 14+86.75
S.N. 021-4546

FILE NAME = 11-540_GPE.DGN	USER NAME = S.A.P.	DESIGNED - A.L.S.	REVISED -	FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL	GENERAL PLAN & ELEVATION			TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = XXX	CHECKED - A.R.K. & J.A.M.	REVISED -		S.N. 021-4546			151	07-02122-01-BR	DOUGLAS	23	5
	PLOT DATE = 01/06/12	DRAWN - S.A.P.	REVISED -					CONTRACT NO. 91473				
		CHECKED - A.R.K.	REVISED -					ILLINOIS BOURBON ROAD DISTRICT				
												#11-540