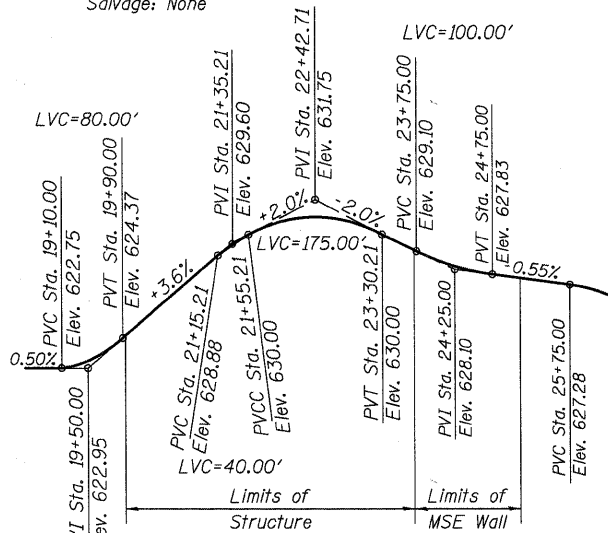


BENCHMARK

Chisled "L" cut on the northwest corner of the 2'-6" x 2'-6" concrete pillar on the west bank of the Fox River, approximately 6'-0" north of the existing railroad bridge. Elevation = 630.36

Existing Structure: None

Salvage: None



PROFILE GRADE
(along PGL & Q Path)

DESIGN SPECIFICATIONS

- 2002 AASHTO Standard Specifications for Highway Bridge
- 1997 AASHTO Guide Specifications for the Design of Pedestrian Bridges.

LOADING HIO & PEDESTRIAN

Vehicle: H-10 Truck (20,000 lb. Vehicle)
Pedestrian: 85 psf
MSE Wall: Minimum surcharge of 85 psf and an equivalent fluid pressure of 50 psf.

DESIGN STRESSES

FIELD UNITS:

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

PRE-ENGINEERED BRIDGE UNITS:

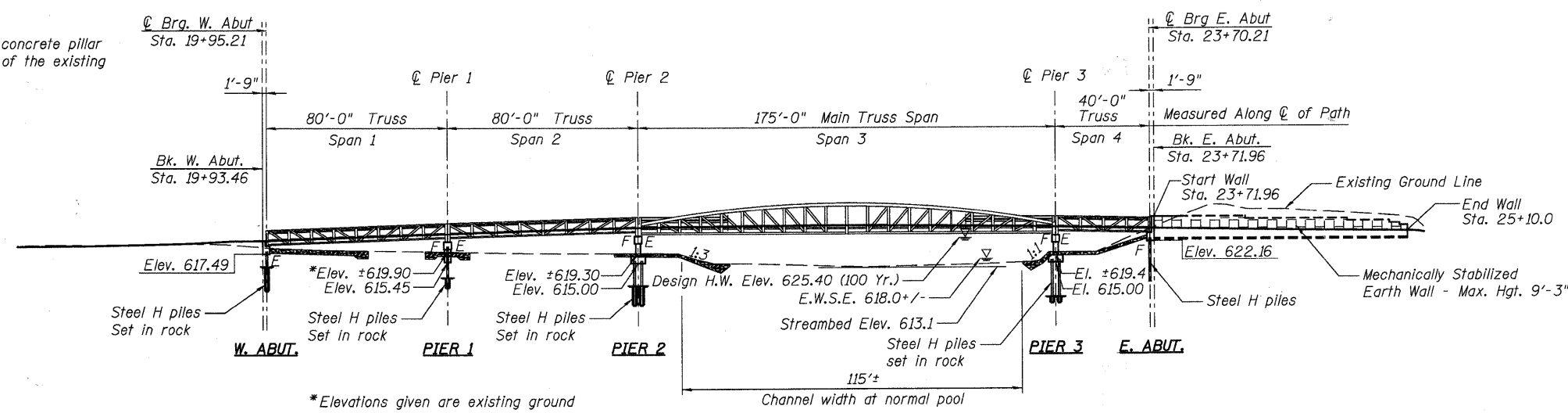
$F_y = 50$ ksi (Struct.) (AASHTO M270, Grade 50 W)
See GBSP "Pedestrian Truss Superstructure"

PRECAST UNITS

$f'_c = 4,500$ psi (MSE Wall Precast Panels)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0



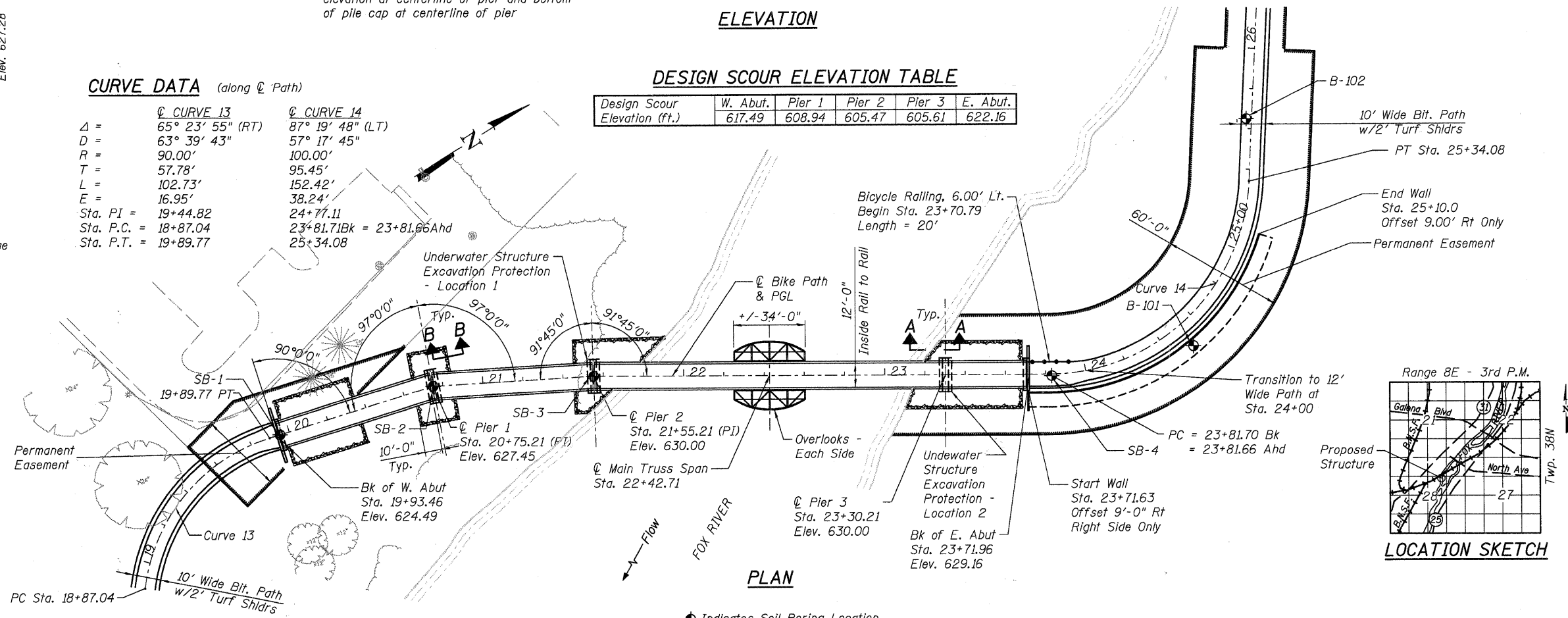
ELEVATION

CURVE DATA (along Q Path)

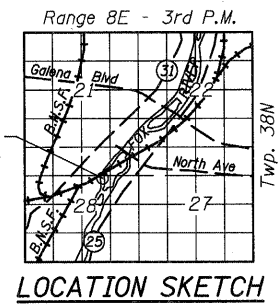
	Q CURVE 13	Q CURVE 14
Δ	65° 23' 55" (RT)	87° 19' 48" (LT)
D	63° 39' 43"	57° 17' 45"
R	90.00'	100.00'
T	57.78'	95.45'
L	102.73'	152.42'
E	16.95'	38.24'
Sta. PI	19+44.82	24+77.11
Sta. P.C.	18+87.04	23+81.71Bk = 23+81.66Ahd
Sta. P.T.	19+89.77	25+34.08

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.
	617.49	608.94	605.47	605.61	622.16



PLAN



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 1,705 sq. mi. Prop. Low Grade Elev. 627.00 @ Sta. 21+55-23+30

Flood	Freq. Yr.	Q	Opening Sq. Ft.		Head - Ft.		Headwater El.		
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	100	9,750	N/A	1,920	625.26	N/A	0.10	N/A	625.36
Base	50	8,890	N/A	1,795	624.73	N/A	0.09	N/A	624.82
Max. Calc.	500	12,650	N/A	2,311	627.03	N/A	0.18	N/A	627.21

I certify that to the best of my knowledge and belief, the bridge and structure 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".

David L. Smoot
David L. Smoot
Date: 12/20/2010
License Expires: 11/30/2012



GENERAL PLAN AND ELEVATION
BICYCLE BRIDGE OVER FOX RIVER
"PUBLIC WATERS"
FOX RIVER TRAIL - SEC. 05-F3000-06-BT
KANE COUNTY
STA. 22+42.71

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174
(630) 443-7755

SHEET NO. 1 24 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		05-F3000-06-BT	KANE	58	22
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 63517					

PLOT DATE = 12/20/2010
 FILE NAME = P:\CIBEL\EST\Projects\2009\U23148_FoxRivTr-PHIT\Structural\Drawings\Plan\BikeBridg-081-DPE.dgn