

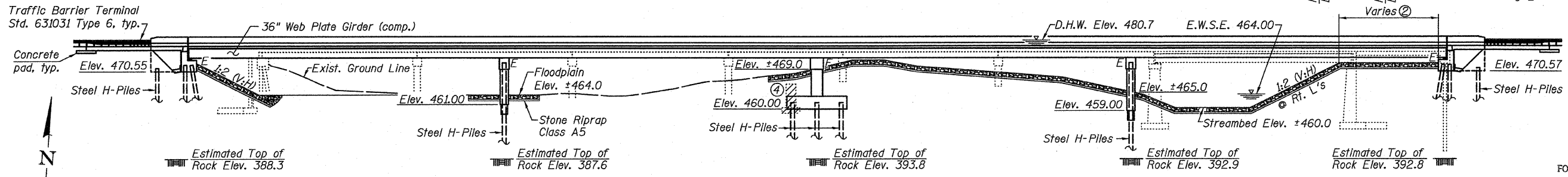
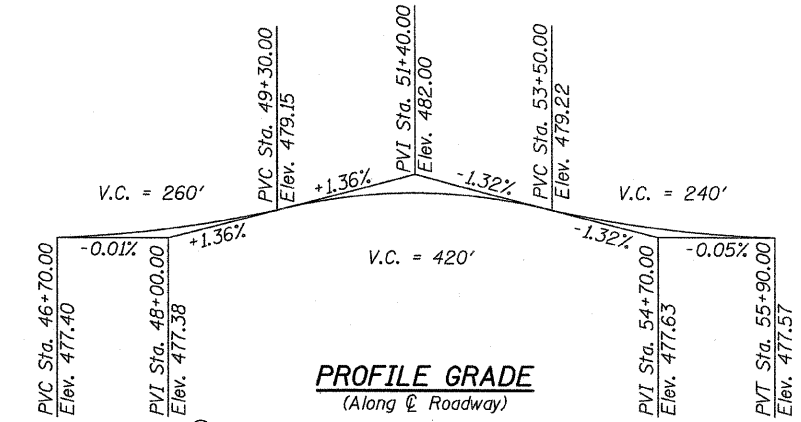
Bench Mark: Chiseled square on N.W. wingwall Sta. 49+69.32, 19' LT. Elev. 477.52

Existing Structure: S.N. 026-0059 built in 1921 as S.B.I. Route 11, Section U-2; widened in 1958 as S.B.I. Route 11, Section U-2BR, reconstructed in 1983 as F.A. Route 752 Section U-2BR-1, Sta. 51+53.12. Existing superstructure consists of six simple spans of precast prestressed concrete deck beams, one span of reinf. concrete deck supported on steel beam superstructure, and one reinf. concrete approach span. The superstructure is supported by one spill-thru pile bent abut., five pile bent piers, one solid wall pier on pile supported spread footing, one closed abutment on a pile supported spread footing, and one integral abutment supported by reinf. concrete piles. Steel WF beams were placed under deficient precast beams in 2007 (not shown below). The back-to-back abutment dimension is 368'-11" while the out-to-out width measures 35'-2". Structure to be removed and replaced.

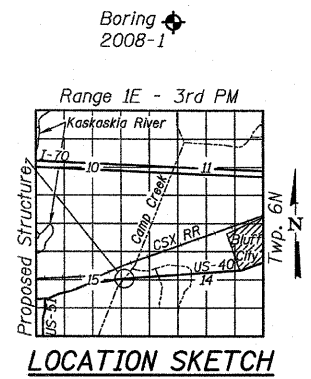
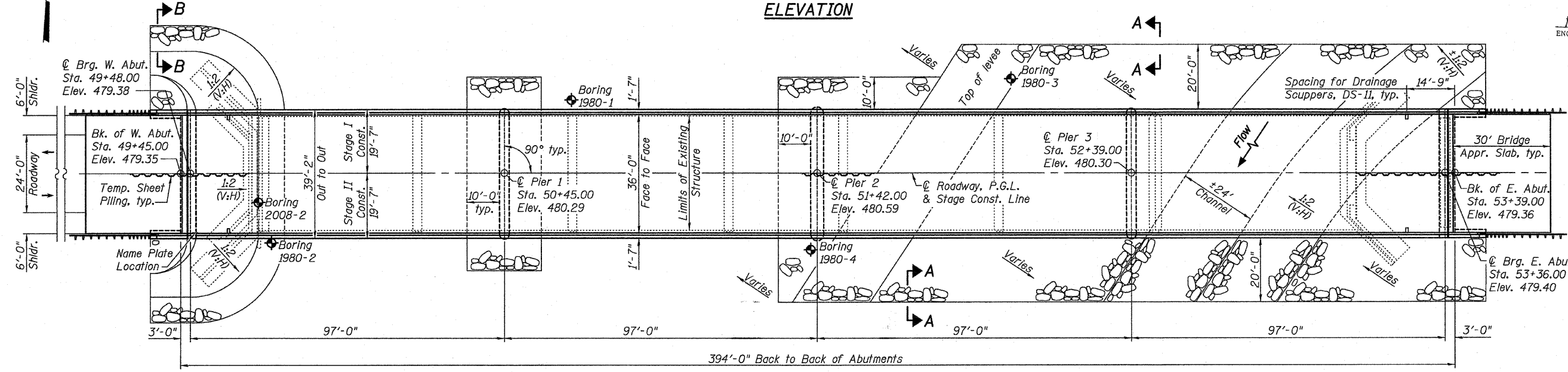
Traffic Control: Staged construction will be utilized by maintaining one lane of traffic during construction.

Salvage: Steel WF beams supporting deficient PPC deck beams. See General Notes on sheet 2 of 38.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TSP)
ENGINEER OF BRIDGES AND STRUCTURES



DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.
	467.6	458.0	460.0	456.0	467.6

WATERWAY INFORMATION

Flood	Freq. (Yr)	Q (CFS)	S.N.	Opening (Sq Ft)		Natural H.W.E.		Head - Ft.		Headwater El.	
				Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Drainage Area = 1977 Sq. Miles											
Exist. Low Grade Elev. = 477.4 Ft. @ Sta. 34+79											
Prop. Low Grade Elev. = 477.4 Ft. @ Sta. 34+79											
Design	50	55,790	026-0059	2,606	2,996	477.4	1.1	1.0	478.5	478.4	Total
				7,768	8,158						
Base	100	67,020	026-0059	2,606	2,996	480.7	0.9	0.9	481.6	481.6	Total
				8,854	9,244						
Overtopping	<10	33,350	026-0059	2,606	2,996	482.2	0.7	0.7	482.9	482.9	Total
				9,366	9,756						
Max. Calc.	500	97,700	026-0059	2,606	2,996	487.4	1.1	1.0	478.5	478.4	Total
				7,768	8,158						
				2,606	2,996	485.7	0.3	0.3	486.0	486.0	Total
				10,669	11,059						

STATION 51+42.00
BUILT 20__ BY
STATE OF ILLINOIS
FAP ROUTE 752 - SECTION (U-2BR)B-1
LOADING HL-93
STRUCTURE NO. 026-0105

NAME PLATE
See Std. 515001

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.23g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.50g
Soil Site Class = D

DESIGN STRESSES
FIELD UNITS

f'_c = 3,500 psi
 f_y = 60,000 psi (Reinforcement)
 f_y = 50,000 psi (AASHTO M 270 Grade 50)
 f_y = 36,000 psi (AASHTO M 270 Grade 36)

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims Allow 50#/sq. ft. for future wearing surface.

LOADING HL-93

- Notes:
- Discharge is for entire floodplain since levees overtop at 10-year flood event.
 - Berm varies from 0'-0" at north end of abutment to ±28'-0" at south end.
 - For Section A-A, Section B-B, and Index of Sheets, see sheet 2 of 38.
 - For note regarding removal of existing pier remnants buried in the vicinity of proposed Pier 2, see General Notes on sheet 2 of 38.

GENERAL PLAN
US ROUTE 40 OVER CAMP CREEK
FAP ROUTE 752 SECTION (U-2BR)B-1
FAYETTE COUNTY
STATION 51+42.00
STRUCTURE NO. 026-0105

SHEET NO. 1 38 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	752	(U-2BR)B-1	FAYETTE	71	23
CONTRACT NO. 74235					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					
			DESIGNED JAD CHECKED DGL DRAWN DGL CHECKED MAG		
OATES ASSOCIATES Consulting Engineers Design Firm License No. 184.001115			Eastport Business Center 1 100 Lanter Court, Suite 1 Collinsville, Illinois 62234 618-345-2200		