

Bench Mark: BM 206, chiseled square on top of north end of west concrete curb on existing structure. Elevation 438.261

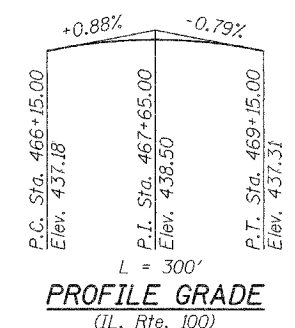
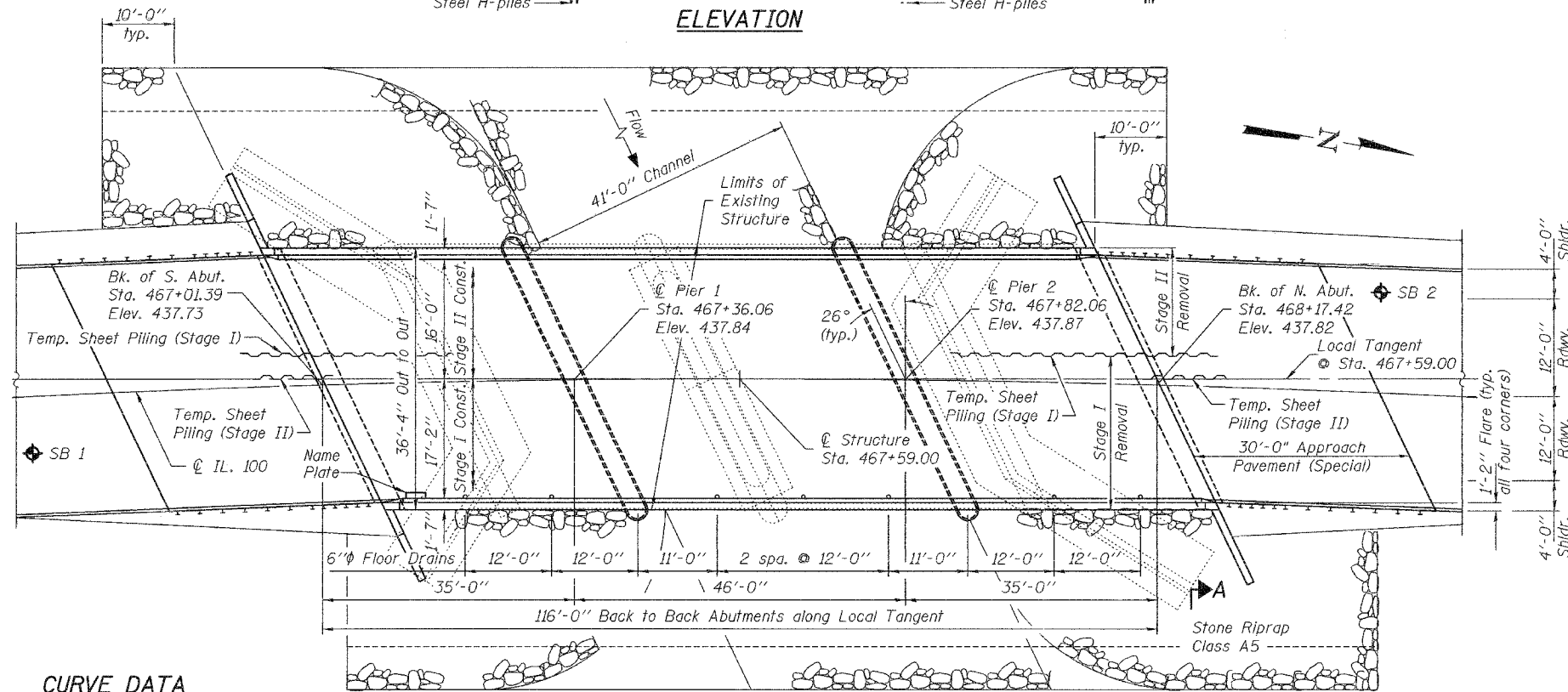
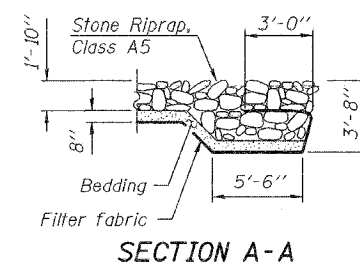
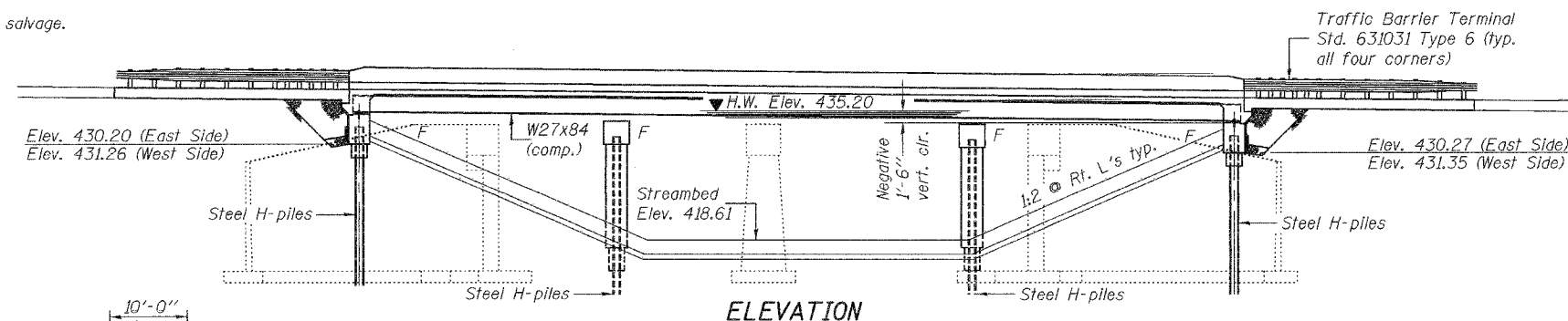
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F.A.P. 304	5BR-2	CALHOUN	68	25	28 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #76948

Existing Structure: S.N. 007-0004, originally built in 1924 as S.B.I. Route 38, Section 5B. The superstructure was replaced and the structure was widened in 1981. The existing structure is a two span deck beam bridge supported on closed abutments and a solid wall pier all on pile supported footings. The back to back abutment length is 72'-7" and the out to out bridge width is 36'-0". Traffic is to be maintained utilizing stage construction.

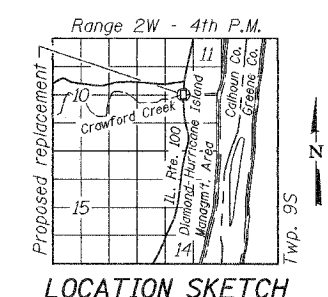
No salvage.



STATION 467+59.00
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 304 SEC. 5BR-2
LOADING HL93
STRUCTURE NO. 007-0027

NAME PLATE
See Std. 515001

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Robert E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



LOADING HL-93
Allow 50#/#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications, 4th Edition

DESIGN STRESSES
 $f_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50 structural steel)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.054g
Site Coefficient (S) = 2.0

GENERAL PLAN AND ELEVATION
IL. ROUTE 100 OVER
CRAWFORD CREEK
F.A.P. ROUTE 304 - SECTION 5BR-2
CALHOUN COUNTY
STATION 467+59.00
STRUCTURE NO. 007-0027

CURVE DATA
PI Sta. = 467+41.98
 $\Delta = 20^\circ-56'-30''$ (RT)
 $D = 2^\circ-49'-17''$
 $R = 2,030.70'$
 $T = 375.30'$
 $L = 742.22'$
 $E = 34.39'$
 $S.E. = 5.8\%$
P.C. Sta. = 463+66.68
P.T. Sta. = 471+08.91

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (feet)	S. Abut.	Pier 1	Pier 2	N. Abut.
	430.0	416.6	416.6	430.1

WATERWAY INFORMATION

Drainage Area = 5.57 sq. mi. Low Grade Elev. 436.21 @ Sta. 462+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Nat. Prop.	H.W.E. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	3,081	743.82	997.32	435.20	0.30	0.15	435.50
Base	100	3,664	743.82	997.32	435.20	0.43	0.22	435.63
Overtopping	N/A	-	-	-	-	-	0.00	0.00
Max. Calc.	500	5,107	743.82	997.32	435.19	0.83	0.43	436.02
Scour	10	1,848	743.82	997.32	435.20	0.11	0.06	435.31



David W. Petermeier
DAVID W. PETERMEIER
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-005642
EXPIRES NOV. 30, 2008

DESIGNED	YSS
CHECKED	RLM
DRAWN	PRC
CHECKED	RLM



02/27/08