

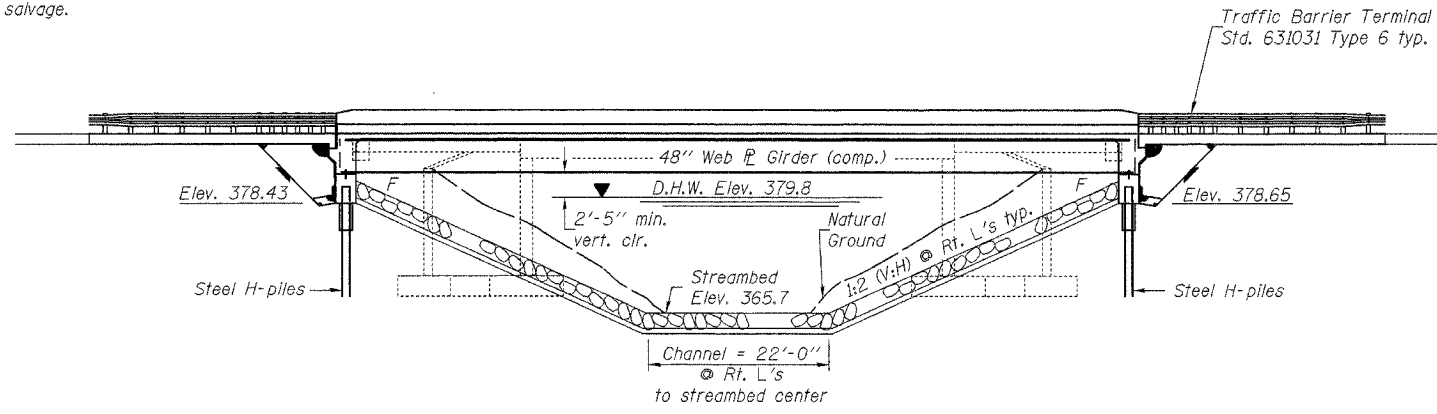
Bench Mark: Square out in NW wingwall @ Sta. 627+93, Elev. 384.92

Existing Structure: S.N. 044-0013 Built in 1930 as SBI Rte. 146 Sec. 107A at Sta. 628+28 as a simple span reinforced concrete T-beam 52'-8" Bk.-Bk. abutment supported on timber piles. Bridge widening in 1983 at Sta. 628+24.63 with PPC deck beams & bituminous overlay. Traffic maintained utilizing stage construction.

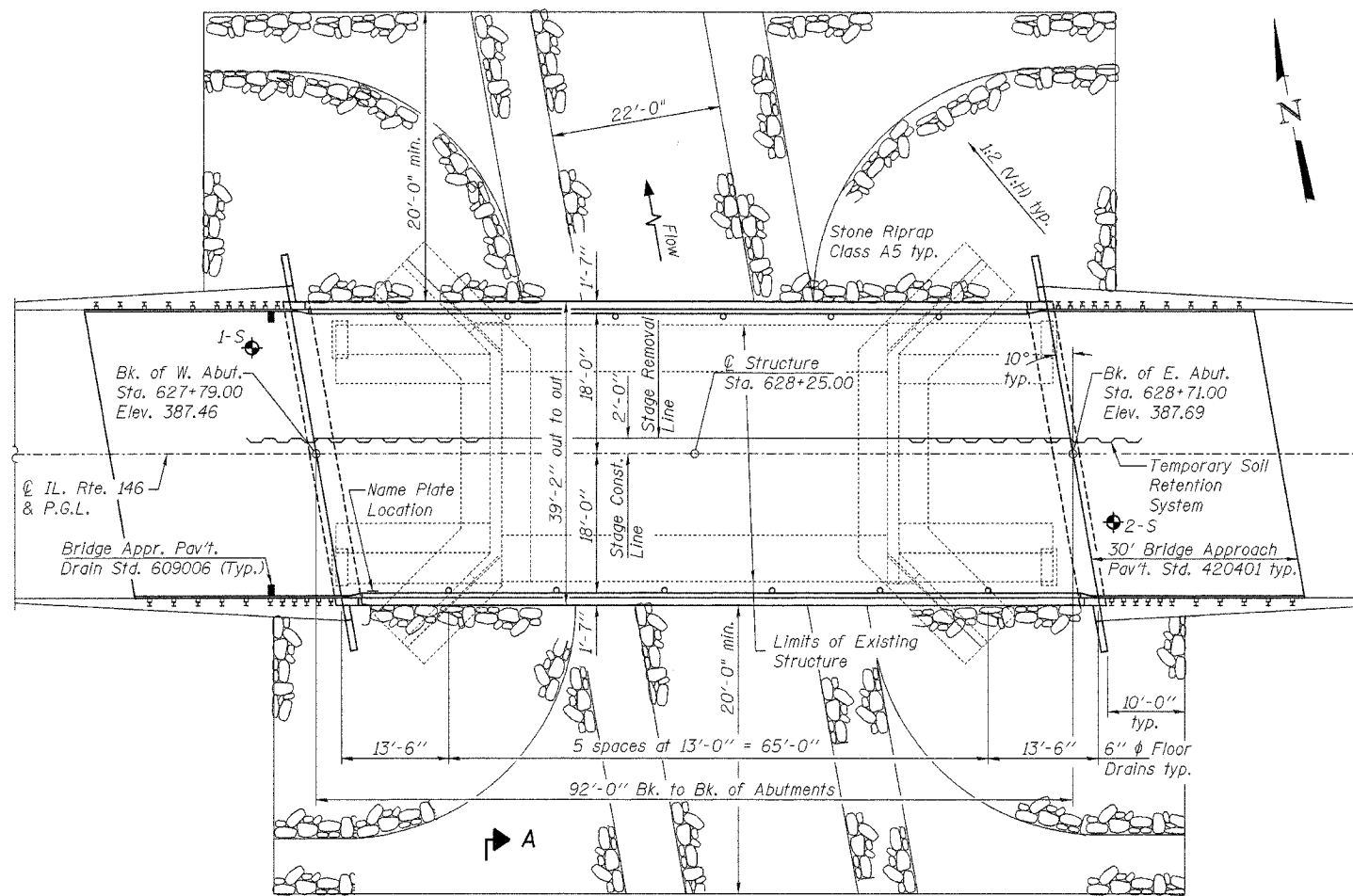
No salvage.

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 885	(107A) B-1	Johnson	38	23
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

Contract # 98776



ELEVATION



PLAN

INDEX OF SHEETS

1. General Plan
2. General Notes & Details
3. Stage Construction Details
4. Deck Elevations
5. Approach Pavement Elevations
6. Superstructure
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8. Concrete End Diaphragms
9. Framing Plan & Steel Details
10. West Abutment
11. East Abutment
12. Temporary Concrete Barrier
13. Bar Splicer Assembly Details
14. Steel Pile Details
15. Soil Borings-1
16. Soil Borings-2

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2004 LRFD AASHTO w/2005 & 2006 Interims

DESIGN STRESSES

FIELD UNITS

- $f'_c = 3,500$ psi
- $f_y = 60,000$ psi (reinforcement)
- $f_y = 50,000$ psi (Structural Steel, M270 Gr. 50)

SEISMIC DATA

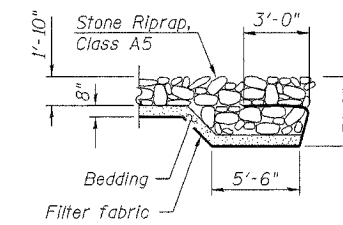
Seismic Performance Zone (SPZ) = 3
 Bedrock Acceleration Coefficient (A) = 0.20g
 Site Coefficient (S) = 1.0

WATERWAY INFORMATION

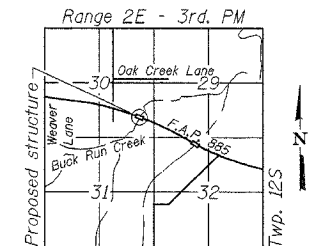
Exist. Low Grade Elev. 386.77 @ Sta. 628+00 (Exist. Align.)
 Prop. Low Grade Elev. 387.45 @ Sta. 627+75 (Prop. Align.)

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	1940	414.9	631.4	378.8	0.3	0.3	379.1	379.1
Base	50	2930	464.9	707.8	379.8	0.7	0.4	380.5	380.2
Max. Calc.	100	3350	484.9	739.5	380.2	0.6	0.2	380.8	380.4
	500	4340	519.9	796.5	380.9	1.0	0.3	381.9	381.2

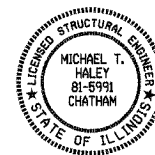
10 year velocity through existing bridge = 4.7 fps 10 year velocity through prop. bridge = 3.1 fps



SECTION A-A



LOCATION SKETCH



Michael J. Haley
 Michael T. Haley
 Licensed Structural Engineer
 State of Illinois No. 81-5991
 Expires 11/30/2008

8-16-07
 Date

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (TSP)
 ENGINEER OF BRIDGES AND STRUCTURES

Design Scour Elevation (feet)	W. Abutment 378.43	E. Abutment 378.65
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
 ILLINOIS ROUTE 146 OVER
 BUCK RUN CREEK
 F.A.P. ROUTE 885 - SEC. (107A)B-1
 JOHNSON COUNTY
 STA. 628+25.00
 STRUCTURE NO. 044-0059

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