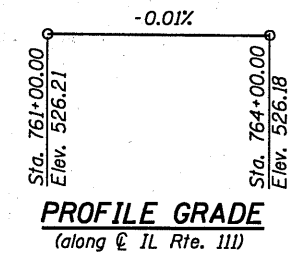
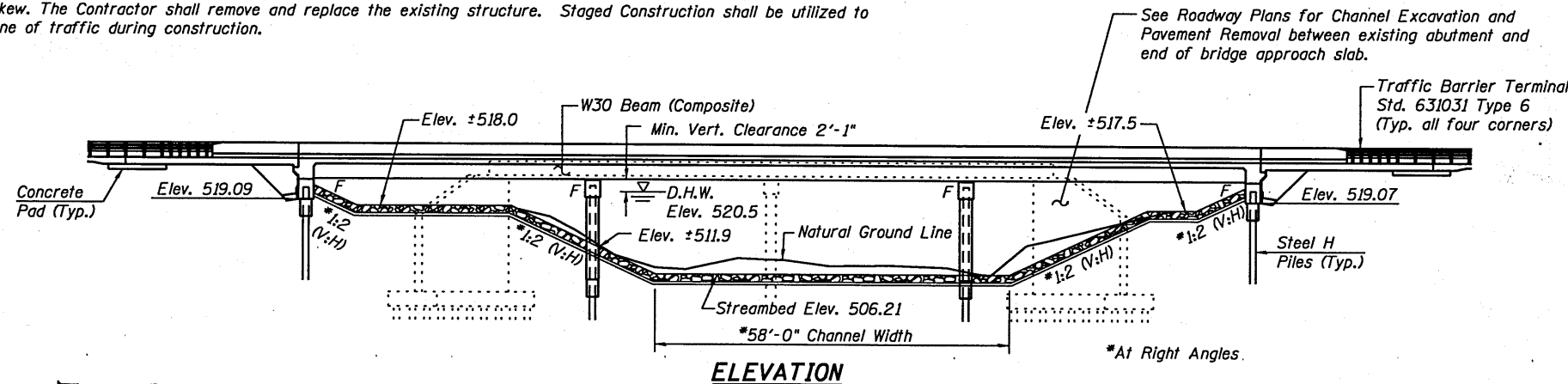


Bench Mark: Chiseled square on N.E. hubguard of existing S.N. 059-0011, Sta. 761+48.512, 16.241' Lt., NAVD 88 Elev. = 526.341.

Existing Structure: S.N. 059-0011 was built in 1930 as S.B.I. Route III, Section 122C at Sta. 762+23.05. In 1979 under FA-608 Section 122BR, the abutment caps were rebuilt, a new pier was built, and the truss superstructure was replaced with deck beams. Existing structure is 2-span with PPC deck beams on closed abutments, 99.7' bk. to bk. abutments, 33.2' out to deck with no skew. The Contractor shall remove and replace the existing structure. Staged Construction shall be utilized to maintain one lane of traffic during construction.

No Salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

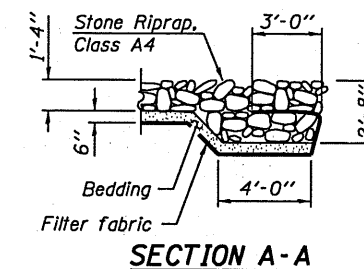
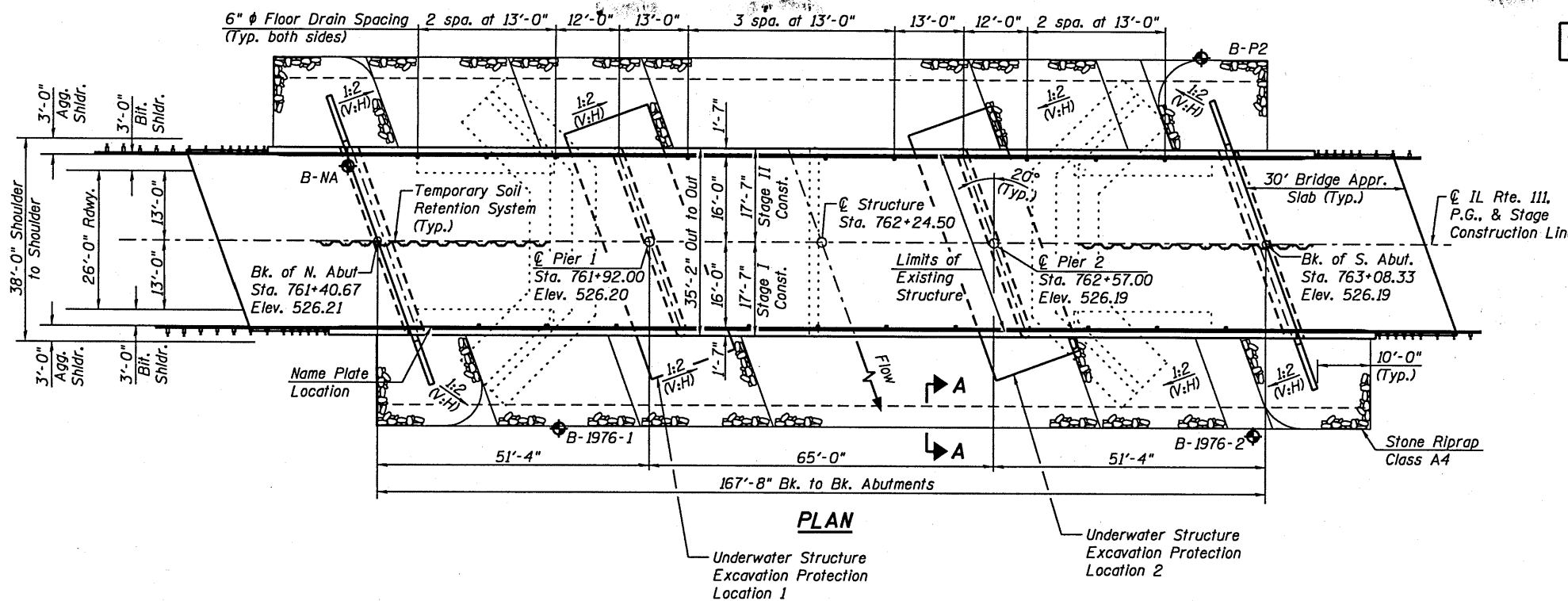


DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	Pier 1	Pier 2	S. Abut.
	519.1	501.0	497.9	519.1

INDEX OF SHEETS

1. General Plan & Elevation
2. General Notes & Details
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
5. Deck Elevations-1
6. Deck Elevations-2
7. Approach Slab Elevations
8. Superstructure
9. Superstructure Details
10. Concrete Parapet Slipforming Option
11. Concrete End Diaphragms
12. Bridge Approach Slab Details-1
13. Bridge Approach Slab Details-2
14. Framing Plan & Steel Details
15. Bearing Details
16. North Abutment
17. South Abutment
18. Pier Details
19. Bar Splicer Assembly and Mechanical Splicer Details
20. HP Pile Details
21. Boring Logs-1
22. Boring Logs-2
23. Boring Logs-3
24. Boring Logs-4



LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 & 2009 Interims

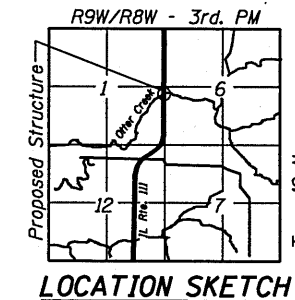
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2  
Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.175g  
Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.346g  
Soil Site Class = D



WATERWAY INFORMATION

Flood		Freq. Yr.	Q C.F.S.		Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Main Channel		10	3643	4917	624	1127	519.7	0.6	0.4	520.2	520.1	
Overflow			7144	7144	1486	1988						
Total			10787	12061	2110	3115						
Main Channel		50	4497	6345	694	1270	520.5	0.8	0.6	521.3	521.1	
Overflow			6692	4844	1226	1226						
Total			11189	11189	1920	2495						
Main Channel		100	4909	6991	720	1315	520.8	0.9	0.7	521.7	521.5	
Overflow			8067	5985	1354	1354						
Total			12976	12976	2074	2669						
Main Channel		500	5720	8176	767	1403	521.4	1.0	0.8	522.4	522.2	
Overflow			11628	9172	1616	1616						
Total			17348	17348	2383	3020						

10 Year Velocity thru Exist. Bridge = 4.47 fps    10 Year Velocity thru Prop. Bridge = 4.31 fps



Michael J. Haley 8-9-2010  
Date  
Michael T. Haley  
Licensed Structural Engineer  
State of Illinois No. 81-5991  
Expires 11/30/2010

APPROVED  
For Structural Adequacy Only

Ralph E. Anderson (TJD)  
Engineer of Bridges & Structures

	SHEET NO. 1	F.A.P. RTE. 608	SECTION 122B-2	COUNTY MACOUPIN	TOTAL SHEETS 53	SHEET NO. 19
	24 SHEETS	CONTRACT NO. 72B53		ILLINOIS FED. AID PROJECT		