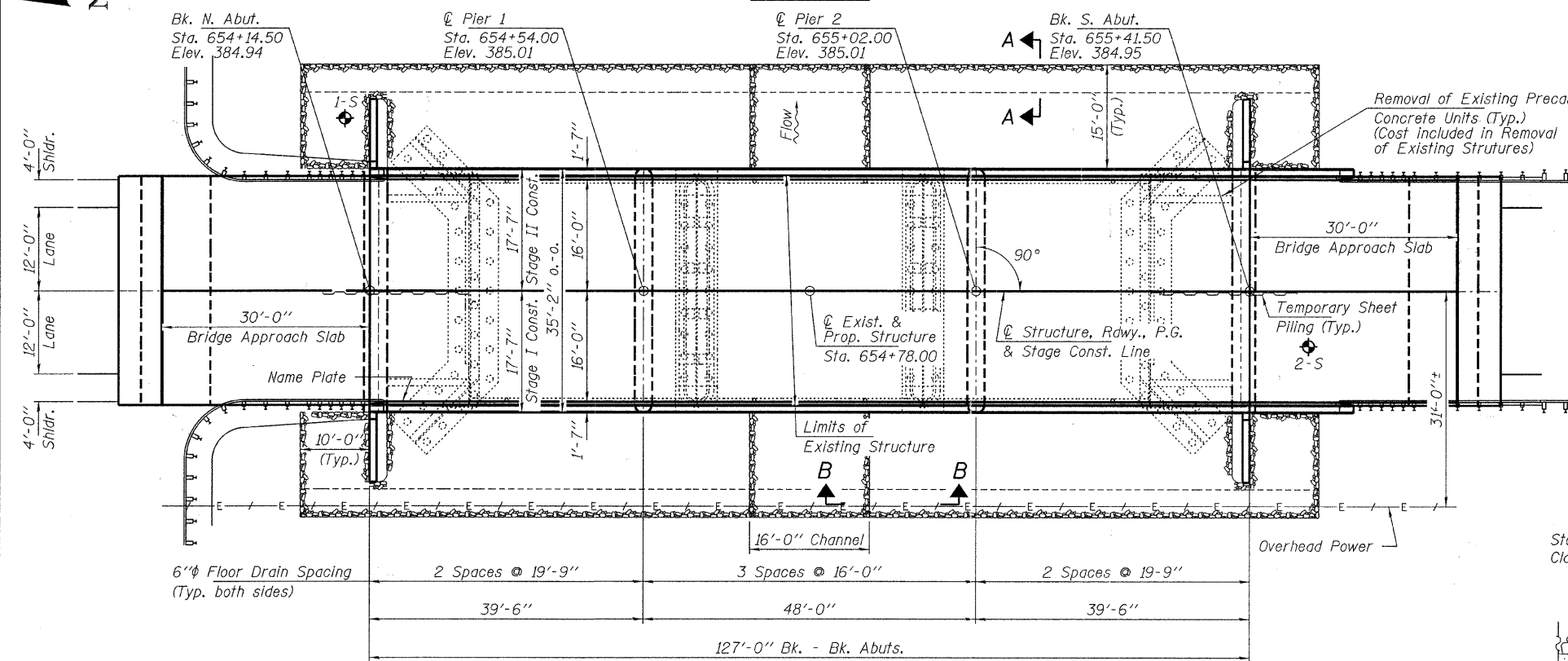
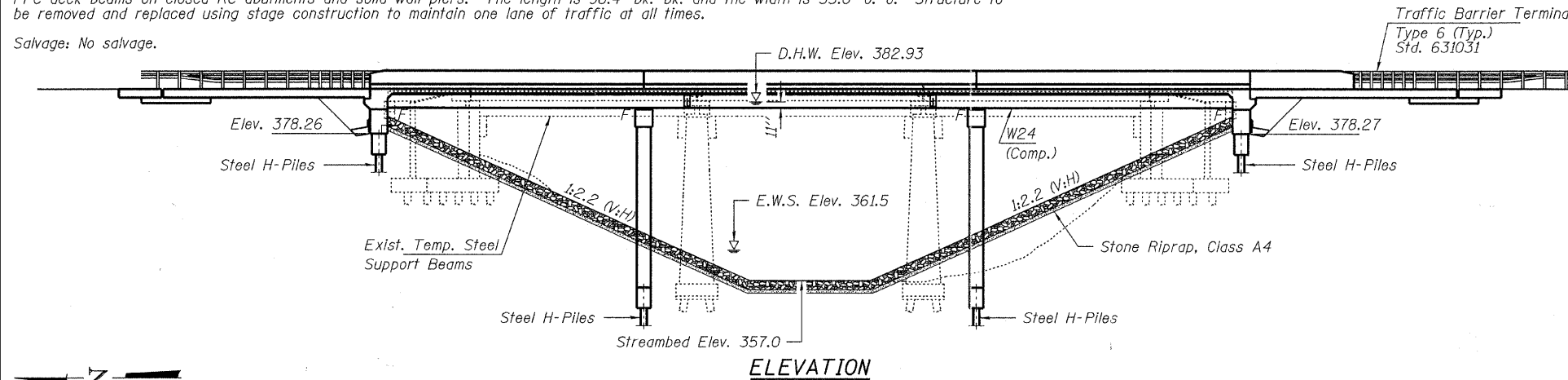


BENCHMARK: Chiseled "□" in S.W. wingwall of structure 18' Rt., Sta. 655+32, Elev. 382.52.

EXISTING STRUCTURE: SN 097-0021 was originally constructed in 1928 as SBI 140, Section 105.B 105 BY-1. It was reconstructed in 1978 with a new superstructure and repairs were made in 2004 and 2008. The superstructure consists of 3 simple spans of 17' deep PPC deck beams on closed RC abutments and solid wall piers. The length is 98.4' bk.-bk. and the width is 33.0' o.-o. Structure to be removed and replaced using stage construction to maintain one lane of traffic at all times.

Salvage: No salvage.

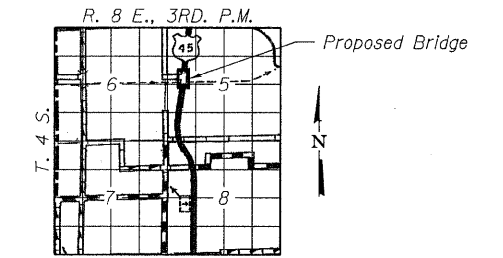


ELEVATION

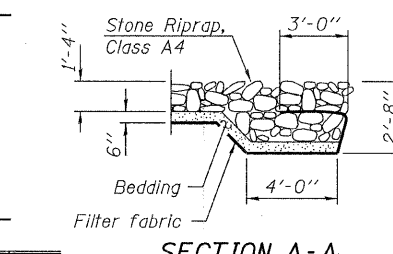
PLAN

INDEX OF STRUCTURE SHEETS

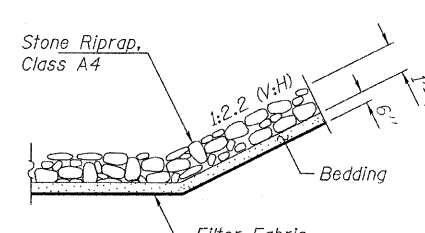
1. General Plan & Elevation
2. General Details
3. Stage Construction Details
4. Temp. Concrete Barrier for Stage Construction
- 5.-7. Top of Slab Elevations
8. Top of North Approach Slab Elevations
9. Top of South Approach Slab Elevations
10. Superstructure
- 11.-12. Superstructure Details
- 13.-14. Bridge Approach Slab Details - North
- 15.-16. Bridge Approach Slab Details - South
17. Structural Steel
18. Structural Steel Details
19. Bearing Details
20. Abutments
21. Piers
22. Bar Splicer Assembly & Mechanical Splicer Det.
23. Cantilever Forming Brackets for Superstructures with W27 Beams and Smaller
24. HP Pile Details
- 25.-26. Borings



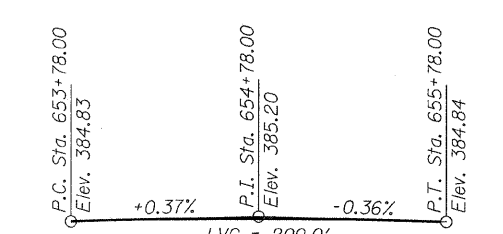
LOCATION SKETCH



SECTION A-A



SECTION B-B



PROFILE GRADE (along centerline)

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications

LOADING HL-93

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

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)
 $f_y = 50,000$ psi (Structural Steel M270 GR. 50)
 $f_y = 36,000$ psi (M270 Gr. 36)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (S_{d1}) = 0.297 g
 Design Spectral Acceleration at 0.2 sec. (S_{d5}) = 0.709 g
 Soil Site Class = D

DESIGN SCOUR ELEVATION TABLE

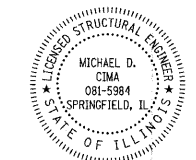
Design Scour Elevation (ft.)	N. Abut.	Pier 1	Pier 2	S. Abut.
	378.3	357.4	357.4	378.3

WATERWAY INFORMATION

Drainage Area = 26.28 Sq. Mi. Existing Low Grade Elev. 382.66 @ Sta. 646+50
 Proposed Low Grade Elev. 382.66 @ Sta. 646+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	2960	1370	1580	381.03	0.24	0.22	381.27	381.25	
Design	50	4600	1520	1700	382.93	0.25	0.18	383.18	383.11	
Base	100	5310	1520	1700	383.83	0.10	0.08	383.93	383.91	
Overtop	50	4600	1520	1700	382.93	0.25	0.18	383.18	383.11	

APPROVED FOR STRUCTURAL ADEQUACY ONLY
 Michael D. Cova
 ENGINEER OF BRIDGES AND STRUCTURES



Michael D. Cova
 ILLINOIS STRUCTURAL NO. 081-5984

Expires 11-30-2012
 7-15-2011

GENERAL PLAN & ELEVATION
 US ROUTE - 45
 OVER SOUTHERN OUTLET
 FAP ROUTE 328 - SECTION 105B-1
 WHITE COUNTY
 STATION 654+78.00
 STRUCTURE NO. 097-0076

FILE NAME = 090140-shr-bridge.dgn
 USER NAME =
 DESIGNED - A.S.L.
 CHECKED - C.C.S.
 DRAWN - D.A.B.
 CHECKED - M.D.C.
 PLOT SCALE =
 PLOT DATE = 7/13/2011

DESIGNED - A.S.L.
 CHECKED - C.C.S.
 DRAWN - D.A.B.
 CHECKED - M.D.C.
 REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
 STRUCTURE NO. 097-0076

SHEET NO. 1 OF 26 SHEETS

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	105B-1	WHITE	54	22

CONTRACT NO. 78161
 ILLINOIS FED. AID PROJECT