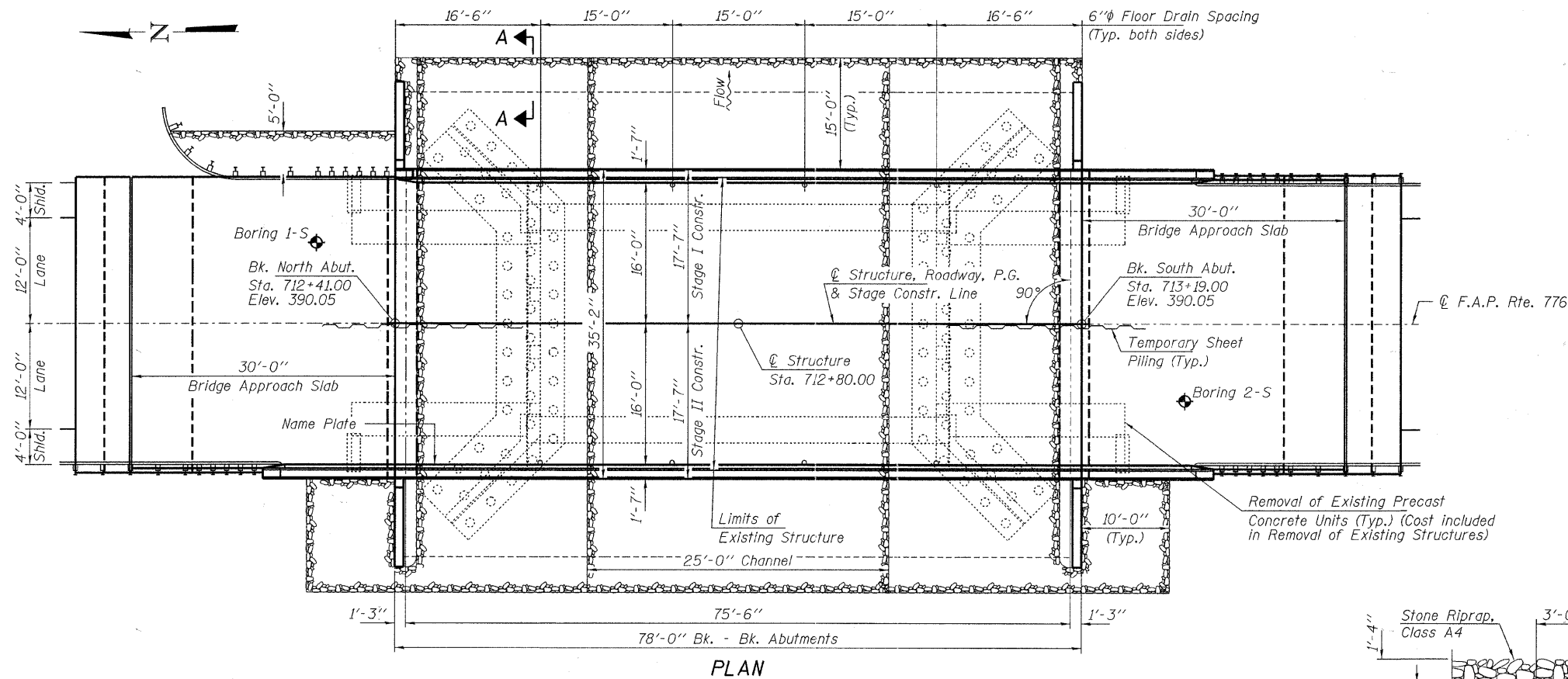
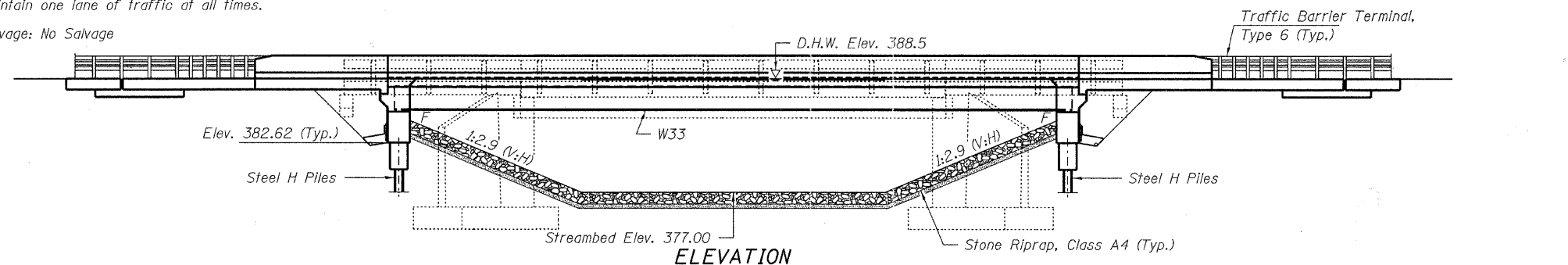


BENCHMARK: Chiseled "X" on southeast wingwall of SN 033-0029. Elev. 387.57

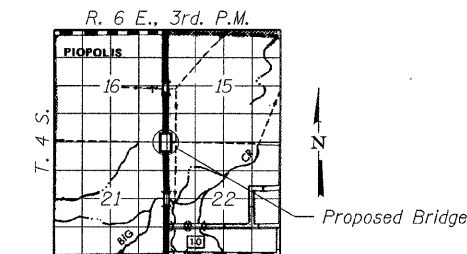
EXISTING STRUCTURE: SN 033-0029 was originally built in 1928 as a 1-span RC T-beam bridge on closed abutments. The structure was widened in 1977 by adding 2-PPC deck beams to each side of the existing superstructure. The bridge is currently 48'-0" bk.-bk. and 33'-1/2" o.-o. Structure is to be removed and replaced using stage construction to maintain one lane of traffic at all times.

Salvage: No Salvage

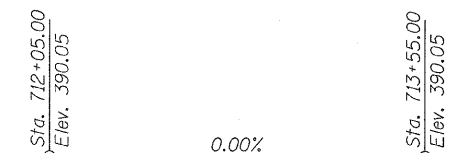


INDEX OF STRUCTURE SHEETS

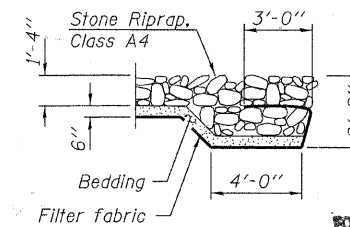
1. General Plan & Elevation
2. General Data
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
- 5.-6. Top of Slab Elevations
7. Top of North Approach Slab Elevations
8. Top of South Approach Slab Elevations
9. Superstructure
- 10.-11. Superstructure Details
- 12.-13. South Bridge Approach Slab Details
- 14.-15. North Bridge Approach Slab Details
16. Structural Steel
17. Structural Steel Details
18. Abutments
19. Bar Splicer Assembly and Mechanical Splicer Details
20. HP Pile Details
- 21.-22. Borings



LOCATION SKETCH

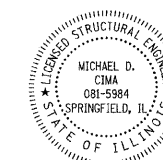


PROFILE GRADE
(along centerline roadway)



SECTION A-A

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



GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 242
OVER BIG CREEK
FAP ROUTE 776 - SECTION 102B-1
HAMILTON COUNTY
STATION 712+80.00
STRUCTURE NO. 033-0054

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 & 2009 Interims

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 Grade 36)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.306g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.731g
Soil Site Class = D

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	S. Abut.
	382.6	382.6

WATERWAY INFORMATION

Drainage Area = 52.7 Sq. Mi.		Proposed Low Grade Elev. 389.99 @ Sta. 713+50										
Flood	Freq. Yr.	Structure Number	Q (cfs)		Opening Sq. Ft.		Natural H.W.E.	Head - Ft.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.		Exist.	Prop.	Exist.	Prop.	
	10	033-0029	1195	2293	320	501	387.1	1.6	1.5	388.7	388.6	
		033-0054	5223	4125	955	955						
		Total	6418	1275	1456							
Base	50	033-0029	413	828	320	501	388.5	2.8	2.9	391.3	391.4	
		033-0054	4418	4703	1127	1127						
		Overtopping	5317	4617								
		Total	10148	1447	1628							
Overtopping	17	033-0029	710	1348	320	501	387.6	1.9	2.0	389.5	389.7	
		033-0054	6790	6403	1015	1028						
		Total	7500	7750	1335	1529						
		Total	7500	7750	1335	1529						

FILE NAME = 090039-sht-bridge.dgn	USER NAME =
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =
ILLINOIS PROFESSIONAL DESIGN FIRM 151 P.E. CDIP - 184-000989	PLOT DATE = 2/22/2011

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 033-0054

SHEET NO. 1 OF 22 SHEETS

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
776	102B-1	HAMILTON	52	24
CONTRACT NO. 78067			ILLINOIS FED. AID PROJECT	