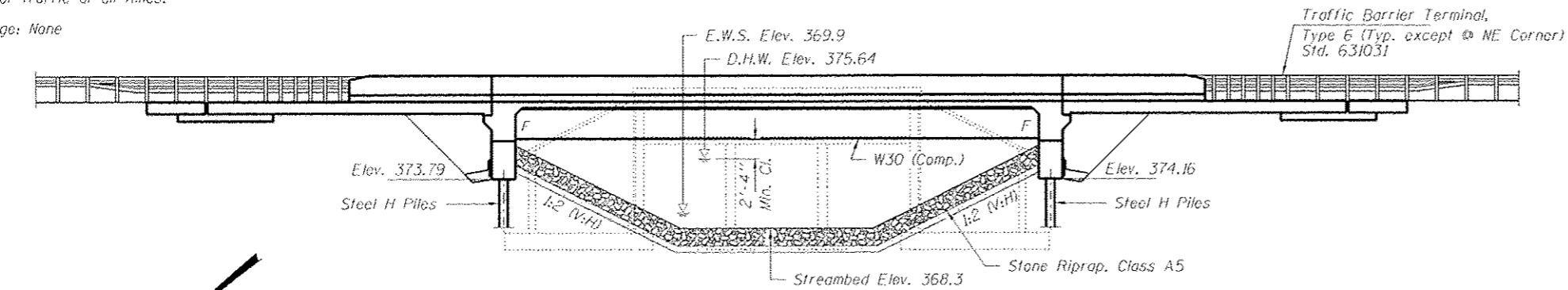


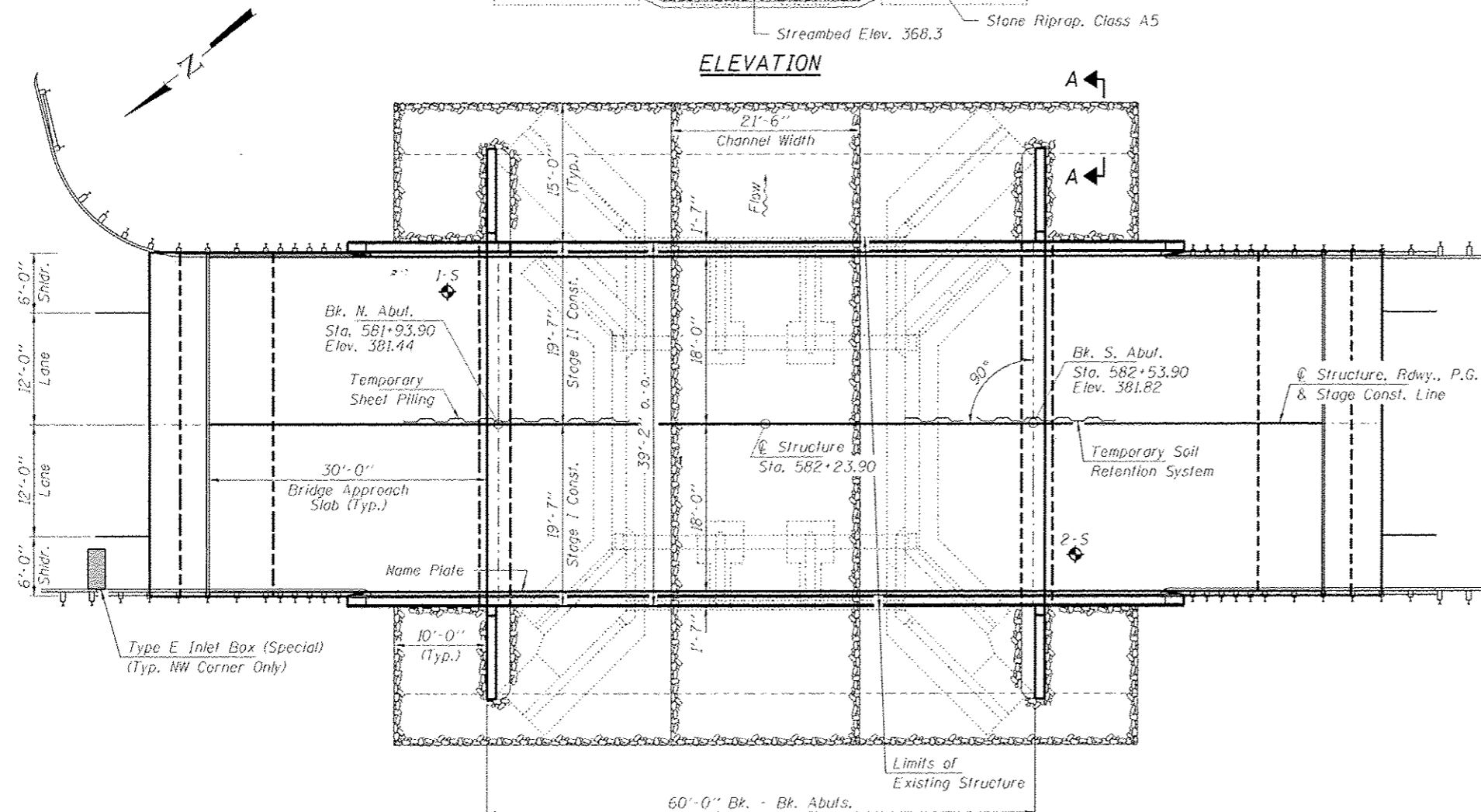
BENCHMARK: BM#AS29 - Chiseled "C" on NE wingwall SN 097-0010, 22' Lt., Sta. 582+08, Elev. 381.17

EXISTING STRUCTURE: SN 097-0010 was built in 1923 as SBI Route 1, Section 3, BY as a 1-span slab bridge on closed abutments. In 1951 it was widened on each side with a 3-span buried slab. The bridge is 30.0' bk. bk. abuts. and 40.0' o.-o. slab. Existing structure to be removed and replaced using stage construction to maintain one lane of traffic at all times.

Salvage: None



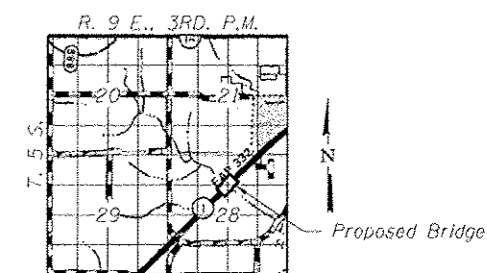
ELEVATION



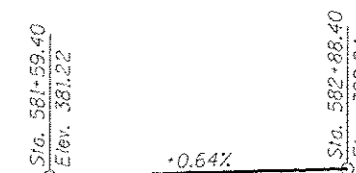
PLAN

INDEX OF STRUCTURE SHEETS

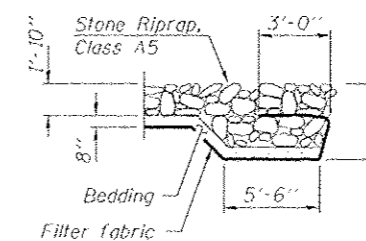
1. General Plan & Elevation
2. General Details
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
- 5.-6. Top of Slab Elevations
7. Top of North Approach Slab Elevations
8. Top of South Approach Slab Elevations
9. Superstructure
- 10.-11. Superstructure Details
- 12.-13.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



LOCATION SKETCH



PROFILE GRADE
(along roadway)



SECTION A-A

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interim

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. 50W)
 $f_y = 36,000$ psi (M270 GR. 36W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (S_D1) = 0.222g
 Design Spectral Acceleration at 0.2 sec. (S_Ds) = 0.614g
 Soil Site Class = C

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	S. Abut.
	373.79	374.16

WATERWAY INFORMATION

Drainage Area = 1.3 Sq. Mi. Existing Low Grade Elev. 380.9 @ Sta. 580+00
 Proposed Low Grade Elev. 380.9 @ Sta. 580+00

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Natural H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
10	824	160	200	374.32	0.27	0.05	374.59	374.37		
Design	50	1400	190	270	375.64	0.63	0.00	376.27	375.64	
Base	100	1680	200	280	375.95	0.59	0.00	376.54	375.95	
Max. Calc.	500	2360	220	320	376.56	1.24	0.00	377.80	376.56	

APPROVED
For Structural Adequacy Only

D. Carl Perry P.E.
Engineer of Bridges & Structures

Michael D. Cima
ILLINOIS STRUCTURAL NO. 081-5984



Expires 11-30-2014
5-10-2013

GENERAL PLAN & ELEVATION
 IL ROUTE 1
 OVER FLANDERS CREEK
 FAP ROUTE 332 - SECTION 2B-1
 WHITE COUNTY
 STATION 582+23.90
 STRUCTURE NO. 097-0074