

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAP 328	SECTION *	COUNTY CLAY	TOWNSHIP 7E	RANGE 3	SHEET 78	SHEET NO. 1 18 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		CONTRACT NO. 74107 *18BR-4B-1	

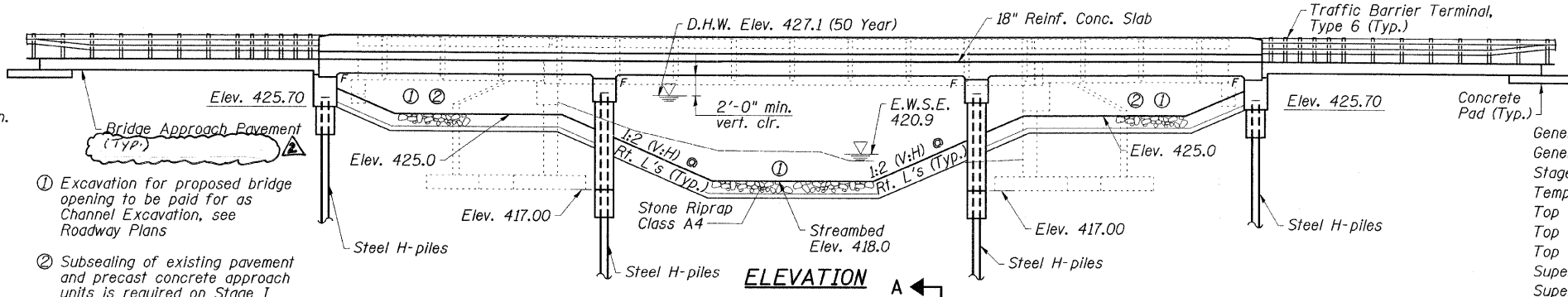
BENCHMARK: BM 209 - Railroad spike in Power Pole No. 217, Sta. 969+25, 29.7' Lt., Elev. 429.86 (NAVD 88)

EXISTING STRUCTURE: SN 013-0015 was originally built in 1921 as SBI 25, Section 8B and was reconstructed in 1974 as SBI 25, Section 8BR-4. It is a single span structure consisting of 21" PPC Deck Beams on closed abutments and wingwalls on spread footings. The deck width is 33'-0" and the length is 53'-0" back to back of abutments. Traffic shall be maintained utilizing stage construction.

No salvage.

STATION 968+56.00
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 328 SEC. (8BR-4)B-1
LOADING HL-93
STR. NO. 013-0043

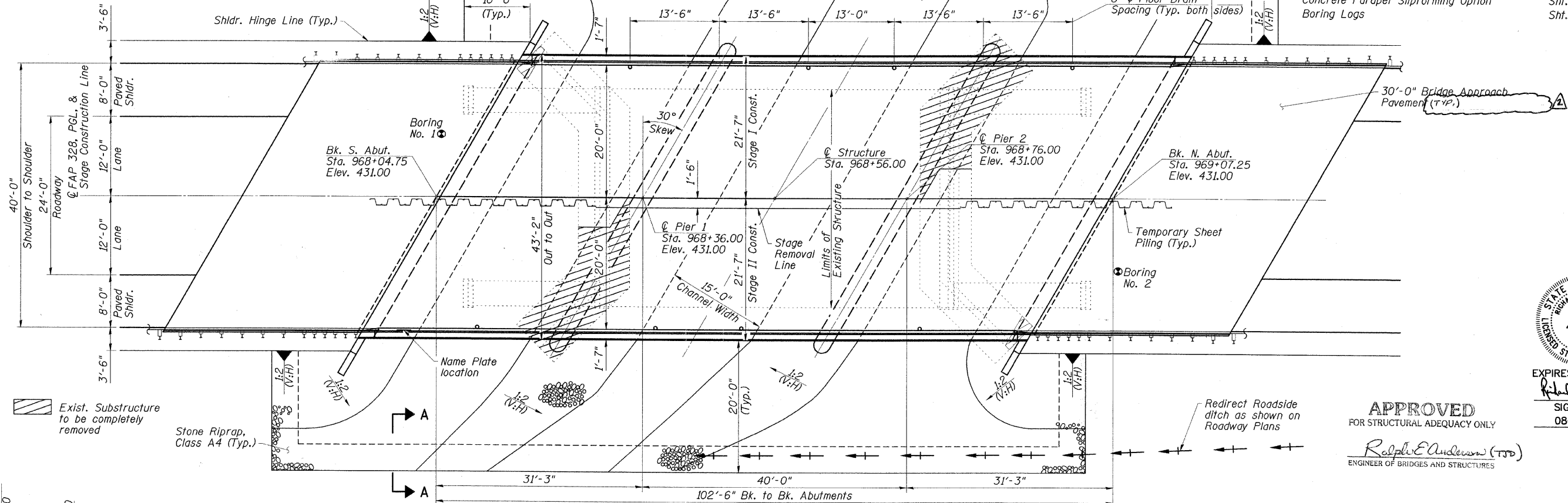
NAME PLATE
See Std. 515001



- ① Excavation for proposed bridge opening to be paid for as Channel Excavation, see Roadway Plans
- ② Subsealing of existing pavement and precast concrete approach units is required on Stage I traffic side prior to implementing Stage I traffic, see Roadway Plans.

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WATERWAY INFORMATION

Total Drainage Area = 6.77 Sq. Mi. Exist. Low Grade Elev. = 430.8 Ft. @ Sta. 971+00
Prop. Low Grade Elev. = 431.0 Ft. @ Sta. 971+00

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.	
Design	10	Main Channel	1138	952	233	280	426.2	0.6	0.5	426.8	426.7
		Overflow	381	567	74	107					
		Total	1519	1519	307	387					
Design	50	Main Channel	1815	1743	278	348	427.1	1.1	0.7	428.2	427.8
		Overflow	641	713	92	127					
		Total	2456	2456	370	475					
Base	100	Main Channel	2137	2040	293	372	427.4	1.8	0.9	429.2	428.3
		Overflow	742	839	98	133					
		Total	2879	2879	391	505					
Overtopping	-	Main Channel	-	-	-	-	-	-	-	-	-
		Overflow	-	-	-	-					
		Total	-	-	-	-					
Max. Calc.	500	Main Channel	2856	2687	328	426	428.1	2.2	1.6	430.3	429.7
		Overflow	1060	1229	112	148					
		Total	3916	3916	440	574					

PLAN

DESIGN SPECIFICATIONS

2007 AASHTO LRFD
LOADING HL-93
Allow 50 psf for future wearing surface.

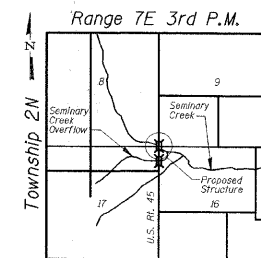
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.09g
Site Coefficient (S) = 1.0



LOCATION SKETCH

SCOUR INFORMATION

Design Scour Elevation (Ft.)	S. Abut.	Pier 1	Pier 2	N. Abut.
	425.70	422.40	422.40	425.70

GENERAL PLAN

US 45 OVER SEMINARY CREEK
FAP ROUTE 328 - SECTION (8BR-4)B-1
CLAY COUNTY
STATION 968+56.00
STRUCTURE NO. 013-0043



EXPIRES 11-30-08

SIGNATURE
08-12-08
DATE

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

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

Rev. 12-31-08

ESCA
CONSULTANTS, INC.

DESIGNED BY: MTD 04/08
DRAWN BY: DWH 04/08
CHECKED BY: DAJ 05/08
APPROVED BY: RDP 08/08