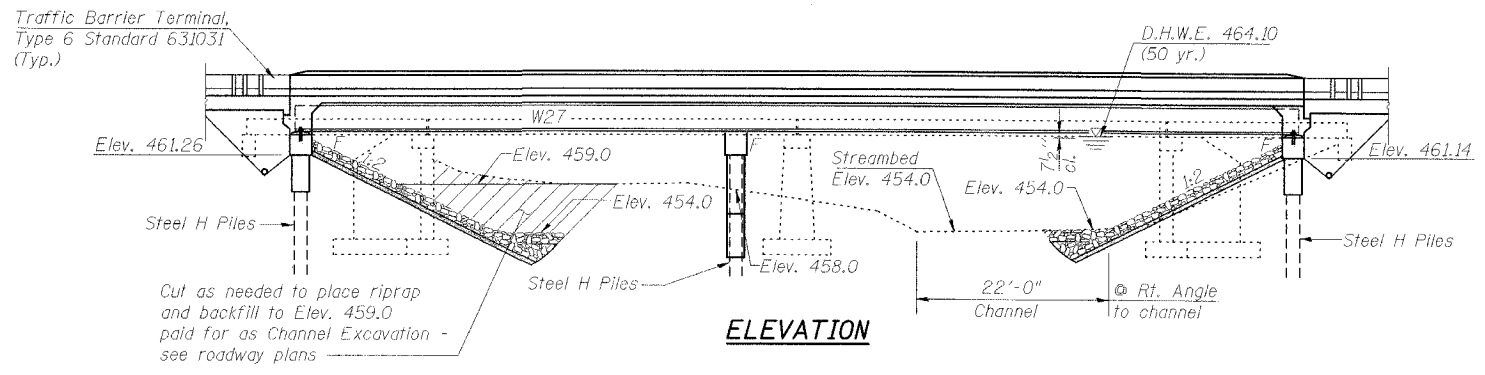


Bench Mark: Chiseled Square on Northeast Hub Guard SN 013-0012, Elev. 467.10
 Existing Structure: SN 013-0012 originally built in 1921 as SBI Route 25, Section 6A. The Superstructure was replaced and the structure widened in 1974 as F.A. Route 26, Section 6BR-2. The rebuilt superstructure is a 2 span PPC Deck Beam bridge with a bituminous overlay. New concrete caps were added to the existing closed concrete abutments and the existing solid concrete pier on spread footings. The existing structure is 86'-0" Bk. to Bk. of abutments and 33'-0" o. to o. of beams. Stage construction will be utilized to maintain 1 lane of traffic each direction. PPC Deck Beam replacement as shown will be required prior to Stage I traffic. No Salvage

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 1 26 SHEETS
FAP 328	*	CLAY	61	18	
CONTRACT NO. 74037					*6BR-2)B-1



STATION 1510+13.00
 BUILT 200 BY
 STATE OF ILLINOIS
 FAP ROUTE 328
 SECTION (6BR-2)B-1
 LOADING HS 20-44
 STR. NO. 013-0041

NAME PLATE
 See Std. 515001

STRUCTURE INDEX OF SHEETS

General Plan	Dwg. No. 1 of 26
General Data	Dwg. No. 2 of 26
Stage Construction Details	Dwg. No. 3 of 26
Temporary Concrete Barrier	Dwg. No. 4 of 26
Deck Beam Replacement Details	Dwg. No. 5-8 of 26
Top of Slab Elevations	Dwg. No. 9-10 of 26
Top of North Approach Slab Elevations	Dwg. No. 11 of 26
Top of South Approach Slab Elevations	Dwg. No. 12 of 26
Superstructure	Dwg. No. 13 of 26
Superstructure Details	Dwg. No. 14 of 26
Diaphragm Details	Dwg. No. 15 of 26
Steel Framing Plan	Dwg. No. 16 of 26
Structural Steel Details	Dwg. No. 17 of 26
Bearing Details	Dwg. No. 18 of 26
North Abutment	Dwg. No. 19 of 26
South Abutment	Dwg. No. 20 of 26
Pier	Dwg. No. 21 of 26
Bar Splicer Assembly Details	Dwg. No. 22 of 26
Cantilever Forming Brackets	Dwg. No. 23 of 26
Steel H-Pile Details	Dwg. No. 24 of 26
Boring Logs	Dwg. No. 25-26 of 26

LOADING HS20-44
 Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
 2002 AASHTO

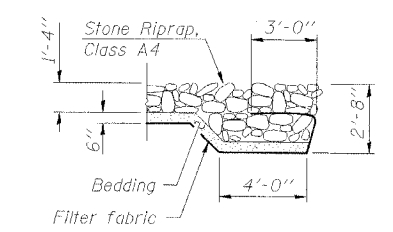
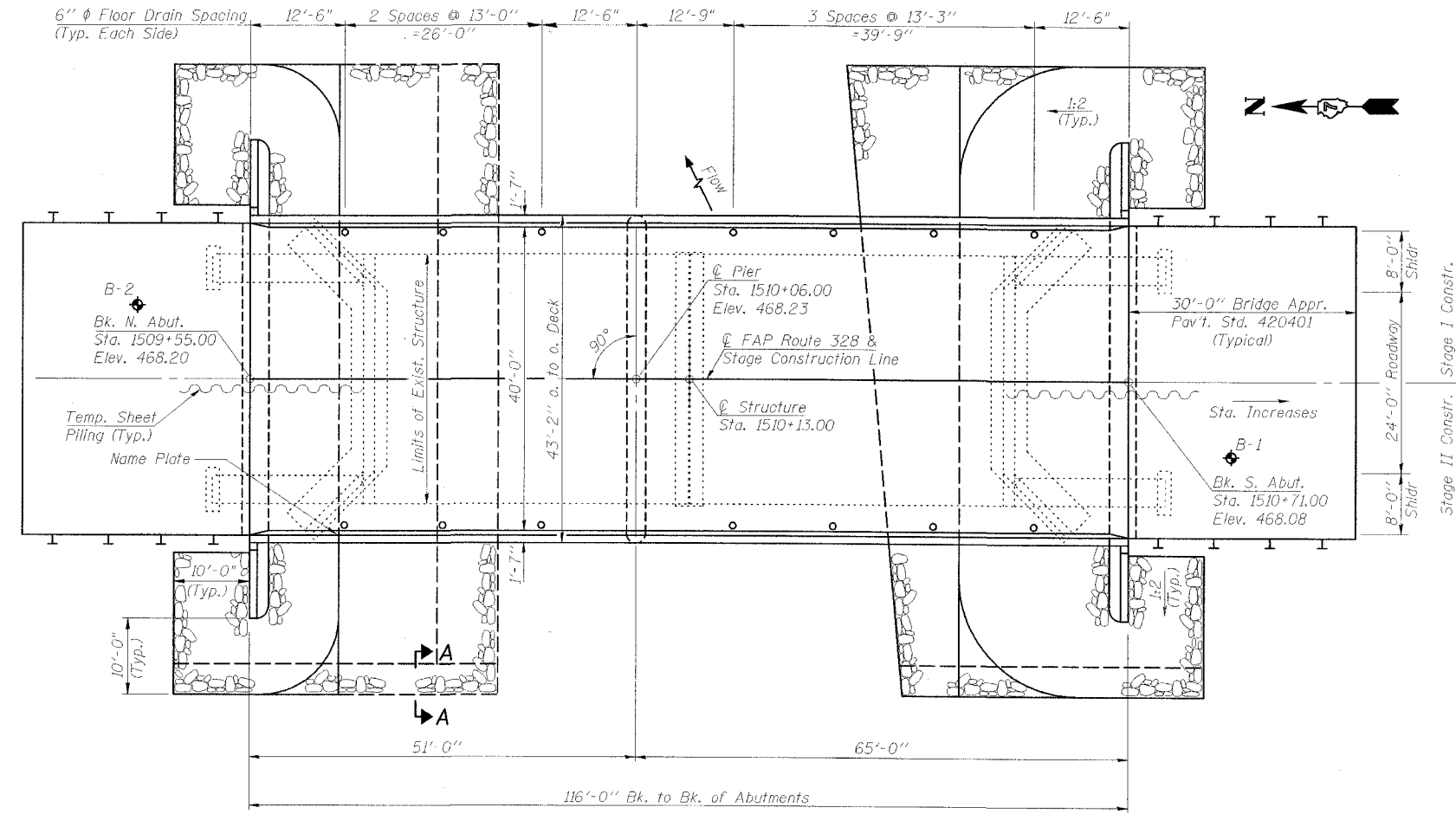
DESIGN STRESSES

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

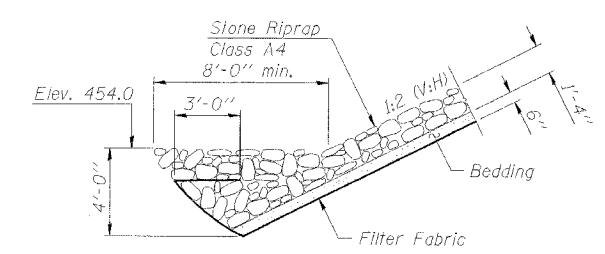
SEISMIC DATA
 Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.085
 Site Coefficient (S) = 1.0

DESIGN SCOUR TABLE

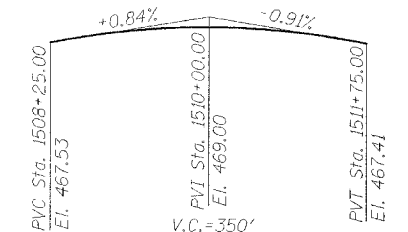
N. Abutment	Pier	S. Abutment
461.3	450.0	461.1



SECTION A-A



STONE RIPRAP ANCHOR DETAIL



PROFILE GRADE
 (Along & Roadway)

GENERAL PLAN
US ROUTE 45 OVER
BUCK CREEK
FAP RTE 328-SECTION (6BR-2)B-1
CLAY COUNTY
STATION 1510+13.00
STRUCTURE NO. 013-0041

WATERWAY INFORMATION

Drainage Area = 16.2 Sq. mi. Low Grade Elev. 466.36 @ Sta. 1515+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	1772	491	631	463.4	0.5	0.4	463.9	463.8	
Base	100	3032	547	707	464.1	1.0	0.7	465.1	464.8	
Overtopping	500	3909	559	739	464.4	1.1	0.8	465.5	465.2	
Max. Calc.	500	3909	559	776	465.0	1.6	1.0	466.6	466.0	

10 yr. velocity thru existing bridge=3.62 cfs
 10 yr. velocity thru proposed bridge=2.82 cfs

ESCA
CONSULTANTS, INC.
 DESIGNED BY: ELH 01/07
 DRAWN BY: CJ 01/07
 CHECKED BY: ELH 03/07
 APPROVED BY: RDP 03/07

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
 LICENSED PROFESSIONAL ENGINEER
 No. 4647
 EXPIRES 11-30-08
Richard J. Pope
 SIGNATURE
 03/17/07
 DATE
 LOCATION SKETCH