

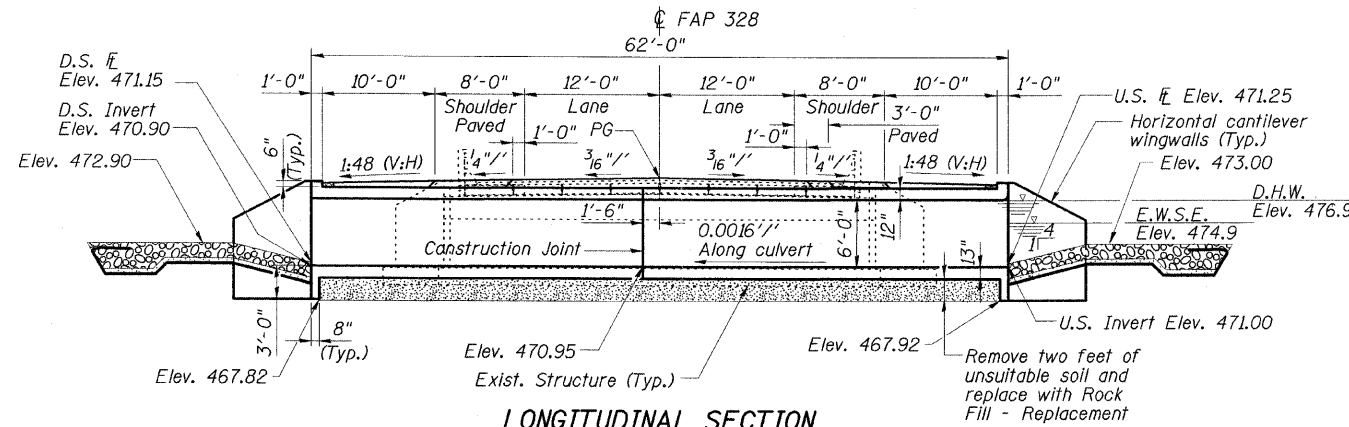
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 328	**	CLAY	109	37	6 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	Contract #74107 **16BR-318-1		

BENCHMARK: BM 262 - Chiseled square on top of curb at SW corner of SN 013-0013, Station 1638+14, 17.42' Rt. Elev. 479.07 (NAVD 88)

EXISTING STRUCTURE:
SN 013-0013 was originally built in 1920 as SBI 25, Section 6A and was reconstructed in 1972 as SBI 25, Section 6BR-3. It is a single span structure consisting of 11" PPC Deck Beams on closed abutments and wingwalls on spread footings. The deck width is 34'-8" and the length is 22'-0" back to back of abutments. Traffic shall be maintained utilizing stage construction.

No salvage.



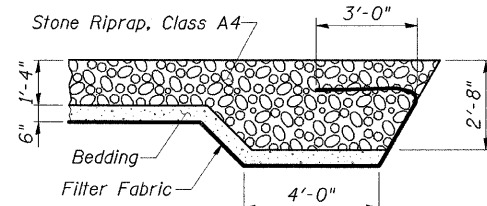
LONGITUDINAL SECTION
(Looking South)

STRUCTURE INDEX OF SHEETS

General Plan	Sheet No. 1 of 6
Stage Construction Details	Sheet No. 2 of 6
Box Culvert Details	Sheet No. 3 of 6
Bar Splicer Assembly Details	Sheet No. 4 of 6
Soil Boring Logs	Sheet No. 5 of 6
Temporary Concrete Barrier for Stage Construction	Sheet No. 6 of 6

GENERAL NOTES

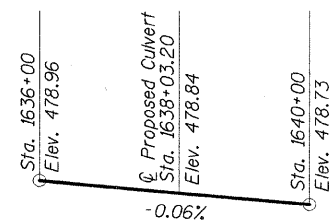
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal of the superstructure.
- If the Contractor's procedure for existing deck beam removal involves placement of cranes or other heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Costs included in Removal of Existing Structures.
- The cost of the removal of existing precast concrete units and approach caps at the approaches is included in the cost of Removal of Existing Structures.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before Stage I removal of the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
- For backfilling and embankment, see Standard Specifications.
- At least 6'-0" of the barrel shall be poured monolithically with wingwalls.
- Precast alternate is not allowed.
- The limits and quantities of Removal and Disposal of Unsuitable Material shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.



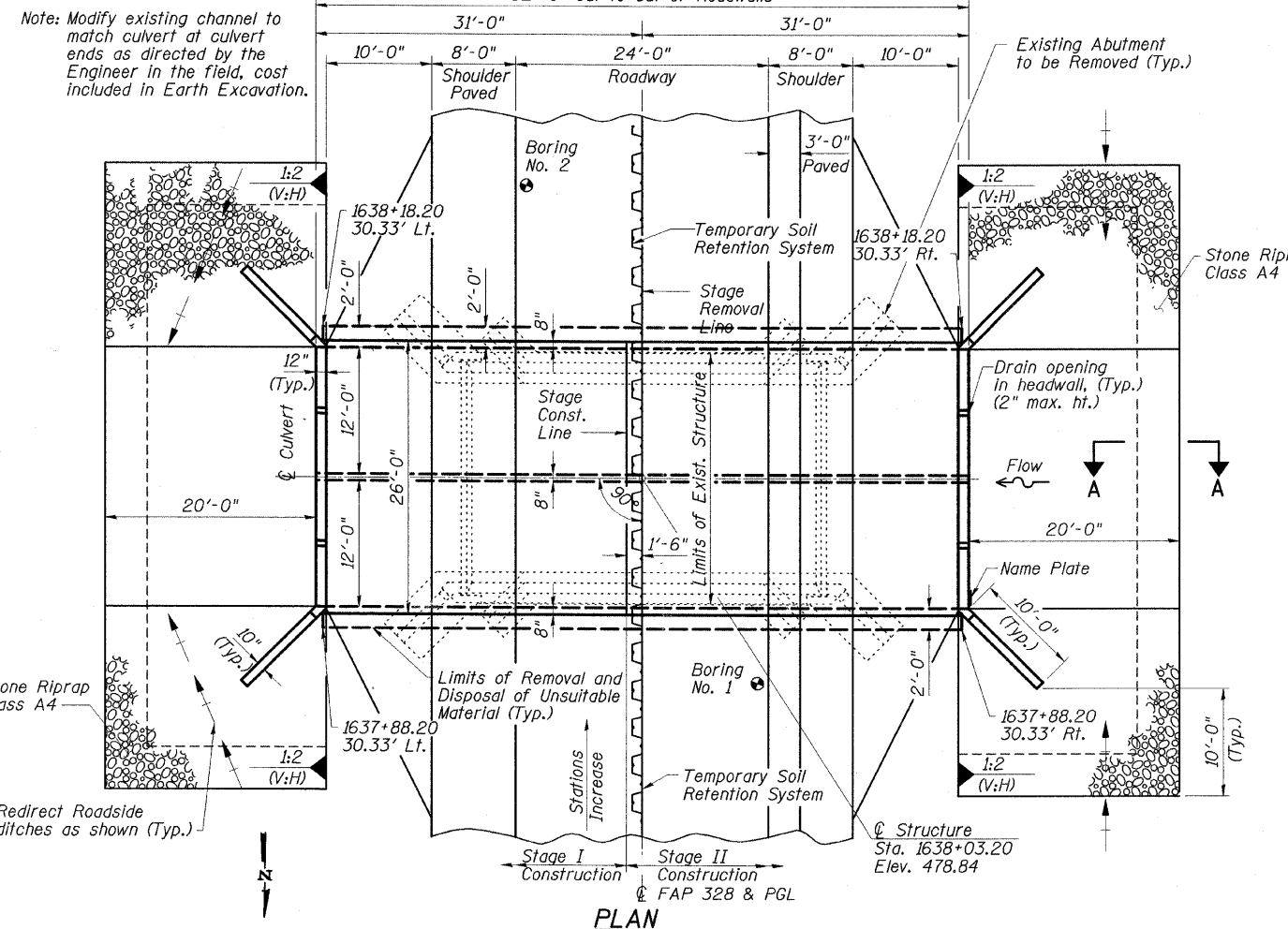
SECTION A-A

STATION 1638+03.20
BUILT 200... BY
STATE OF ILLINOIS
FAP RT. 328 SEC. (6BR-3)B-1
LOADING HS20-44
STR. NO. 013-2010

NAME PLATE
See Std. 515001



PROFILE GRADE
(Along Centerline Roadway)



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Stone Riprap, Class A4	Sq. Yd.	281
Filter Fabric	Sq. Yd.	281
Removal of Existing Structures No. 2	Each	1
Concrete Box Culverts	Cu. Yd.	167
Reinforcement Bars	Pound	29,790
Temporary Soil Retention System, (Location 2)	Sq. Ft.	255
Name Plates	Each	1
Bar Splicers	Each	129
Rock Fill - Replacement	Cu. Yd.	115
Removal and Disposal of Unsuitable Material	Cu. Yd.	115

See Roadway Plans for quantities of Temporary Concrete Barrier, Earth Excavation, and Porous Granular Embankment.

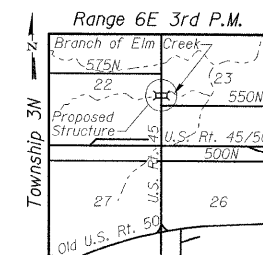


EXPIRES 11-30-08
SIGNATURE
8-12-08
DATE

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

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

GENERAL PLAN
US 45 OVER BRANCH OF ELM CREEK
FAP ROUTE 328 - SECTION (6BR-3)B-1
CLAY COUNTY
STATION 1638+03.20
STRUCTURE NO. 013-2010



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 0.66 Sq. Mi.		Exist. Low Grade Elev. = 478.58 Ft. @ Sta. 1638+14		Prop. Low Grade Elev. = 478.66 Ft. @ Sta. 1641+00				
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. Head-Ft. Exist. Prop.	Headwater El. Exist. Prop.			
Design	10	393	66	76	476.4	1.0	477.4	476.7
Base	50	657	76	88	476.9	1.7	478.6	478.0
Overtopping	100	780	80	88	477.1	1.7	478.8	478.5
Overtopping	35	590	70	-	476.8	1.7	-	478.5
Overtopping	100	780	-	88	477.1	-	1.4	478.5

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS

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

ESCA
CONSULTANTS, INC.

DESIGNED BY: FMA 03/08
DRAWN BY: CJ 03/08
CHECKED BY: ELH 05/08
APPROVED BY: RDP 08/08

SCOUR INFORMATION

Design Scour Elevation (Ft.)	Upstream	Downstream
	468.00	467.90