Bench Mark: Bench Mark #100 Railroad spike in the west face of power pole in N.E. quadrant of intersection 1600th. North Elevation 672.72

Existing Structure: 070-0018, Built 1928 as SBI Route 169, Section 116BR at Station 843+61.00 as 1-span reinforced concrete slab bridge with closed abutments on untreated timber piles. Superstructure replaced in 1980 with PPC deck beams and bituminous wearing surface. 34'-11" face to face abutments. 33'-0" out to out beams. Traffic to be maintained using stage construction.

The existing bridge is to be removed.

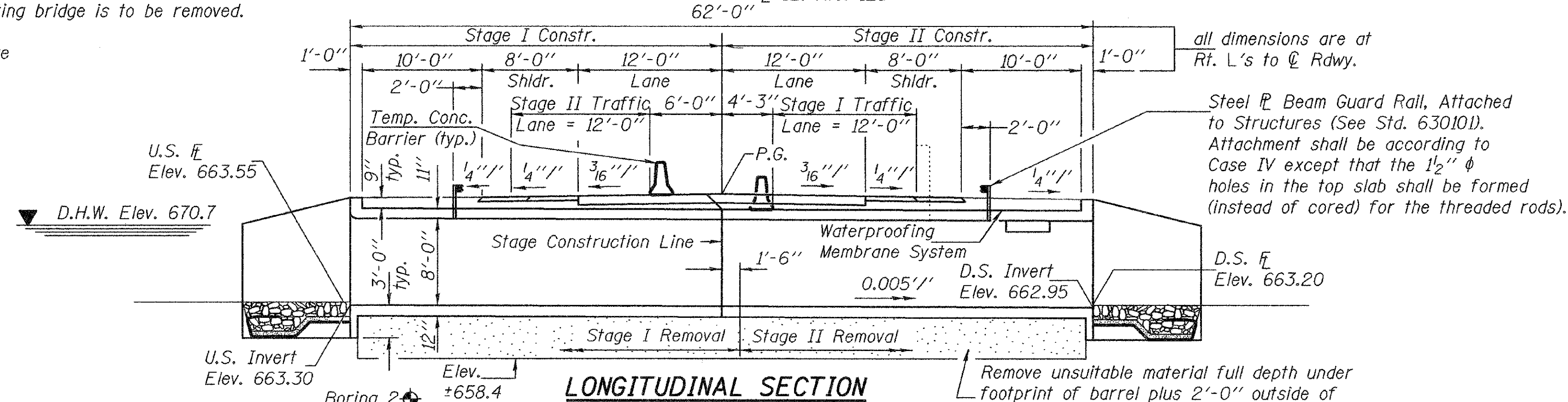
No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

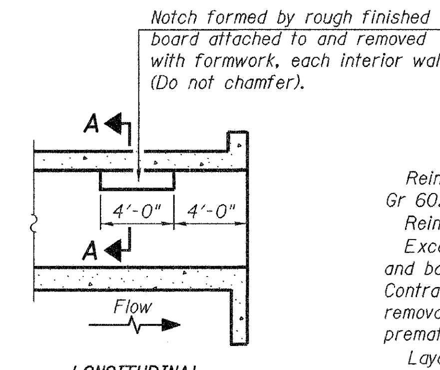
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 770	*	MOULTRIE	46	25
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
9 SHEETS

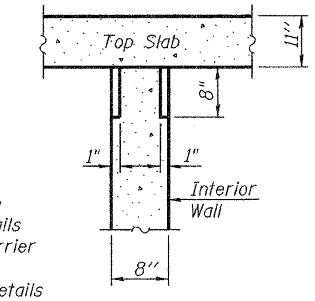
Contract #74183 *(116BR)B-1 & (116BR1)BR



LONGITUDINAL SECTION
(Looking North)



LONGITUDINAL SECTION



SECTION A-A

PHOEBE NESTING SITE DETAILS
(Downstream End Only)

GENERAL NOTES

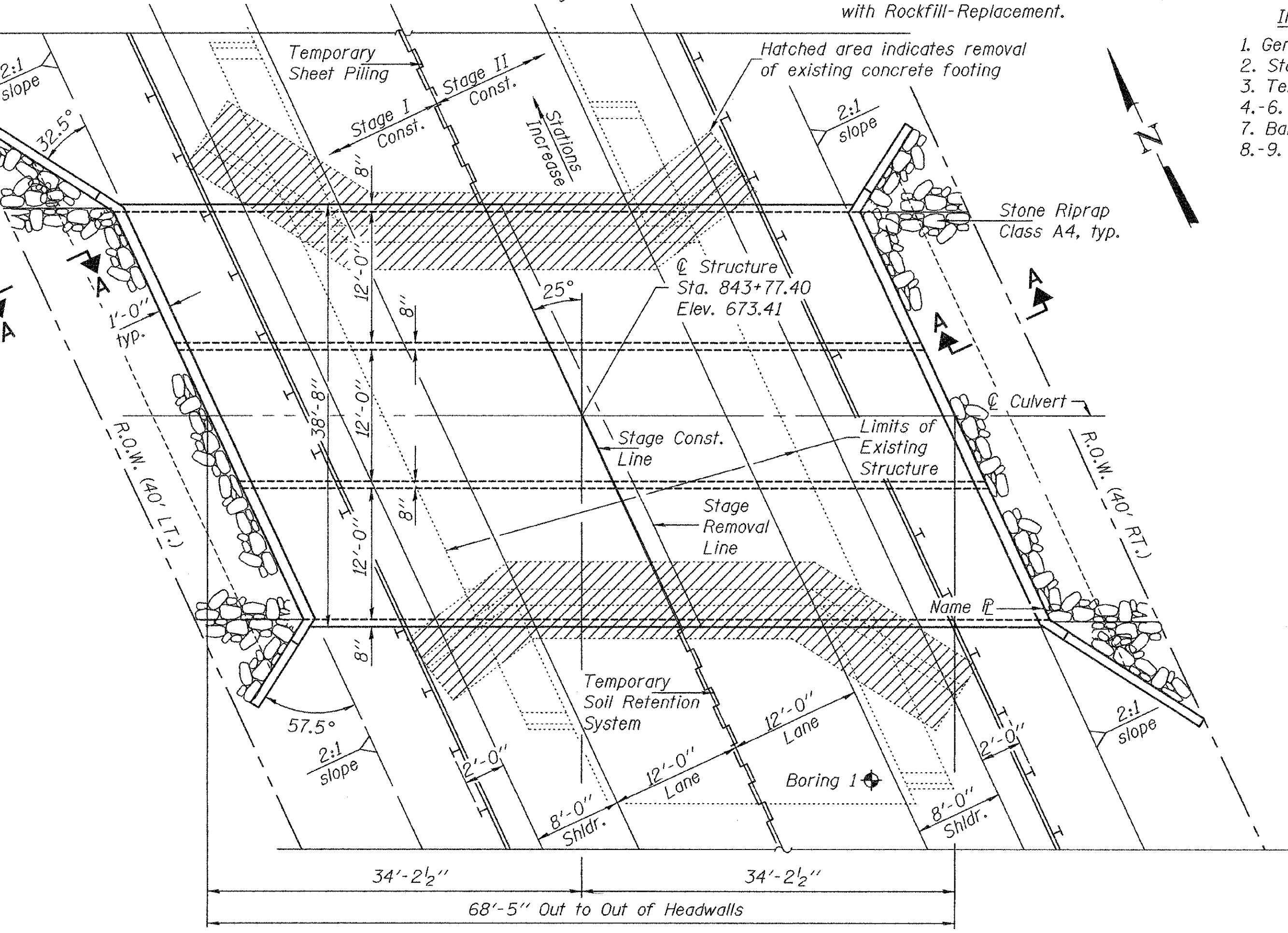
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

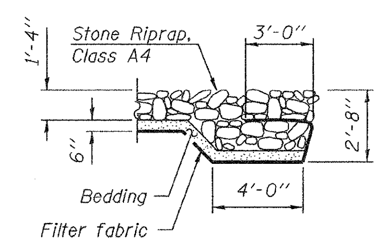
Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Precast alternate is not allowed.



PLAN



SECTION A-A

TOTAL BILL OF MATERIAL

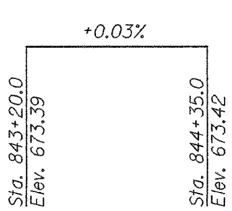
ITEM	UNIT	TOTAL
Rockfill-Replacement	Ton	790
Stone Riprap, Class A4	Sq. Yd.	102
Filter Fabric	Sq. Yd.	102
Removal of Existing Structures	Each	1
Removal & Disposal of Unsuitable Material	Cu. Yd.	395
Concrete Box Culverts	Cu. Yd.	270
Reinforcement Bars, Epoxy Coated	Pound	65,610
Bar Splicers	Each	220
Name Plates	Each	1
Waterproofing Membrane System	Sq. Yd.	285
Temporary Sheet Piling	Sq. Ft.	725
Temporary Soil Retention System	Sq. Ft.	330
Steel ℙ Beam Guardrail, Attached to Structures	Foot	74

STATION 843+77.40
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 770 SECTION (116BR)B-1 & (116BR1)BR
LOADING HS20
STRUCTURE NO. 070-2019

NAME PLATE
See Std. 515001

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	660.30	659.95



PROFILE GRADE
(along ℄ F.A.P. Rte. 770)

WATERWAY INFORMATION

Proposed Low Grade Elev. 673.32 @ Sta. 843+00

Drainage Area = 5.2 sq. mi. Existing Low Grade Elev. 673.32 @ Sta. 843+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	805	171	241	670.0	0.3	0.2	670.3	670.2
Design	50	1313	193	266	670.7	0.7	0.6	671.4	671.3
Base	100	1541	203	277	671.0	0.9	0.8	671.9	671.8
Overtopping	–	–	–	–	–	–	–	–	–
Max. Calc.	500	2100	219	299	671.6	1.5	1.4	673.1	673.0

DESIGNED	Jay D. Edwards
CHECKED	[signature]
DRAWN	W.D. Collins BML
CHECKED	JDE / NRB

EXAMINED September 16, 2008 [signature] ENGINEER OF BRIDGE DESIGN

PASSED Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

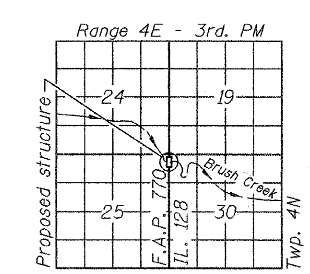
Expires Nov. 30, 2008

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)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
IL. RTE. 128 OVER BRUSH CREEK
F.A.P. RTE. 770 -
SEC. (116BR)B-1 & (116BR1)BR
MOULTRIE COUNTY
STATION 843+77.40
STRUCTURE NO. 070-2019

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