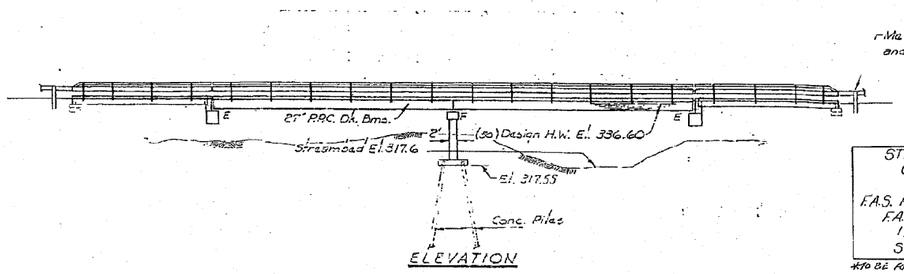
M.: Chiseled "B" in center of island, 21' left of Station 224+18, Elev. 335.81

Existing Structure: FAP-0016 Built as SS Rig. 2 Sec. 15 B-C in 1920. The existing 123'-0"±h. to Bk. Single span, Pony Truss is to be utilized as a temporary bridge on the detour, which shall be moved 45' west and 28' south. The existing waterhole is 23'-0" Out to Out. The contractor shall construct a new widened P.C.C. Deck Bms. superstructure, a pier with cofferdam and a new abutment caps. The contractor shall remove the temporary bridge after construction is complete.

No Salvage.

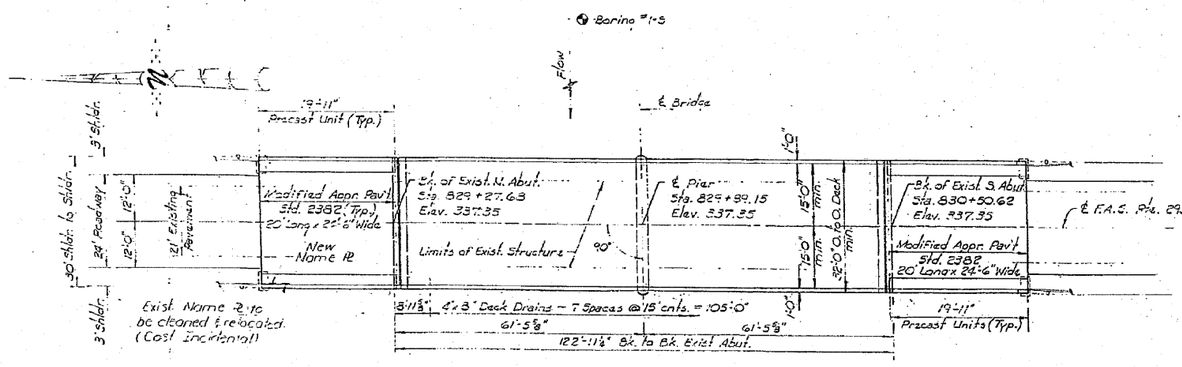
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



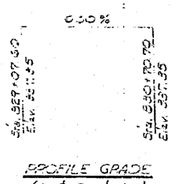
ELEVATION

STATION 829+89.15
CACHE RIVER
REBUILT 19
F.A.S. RT. 2936 SEC. 15BC-BR
F.A. PROJECT BR-3-293(6)S
LOADING HS20
STR. NO. *
*TO BE FURNISHED BY DIST.

NAME PLATE
(See Std. 2113)



PLAN



PROFILE GRADE
(@ ℄ Roadway)

WATERWAY INFORMATION

Drainage Area 165 sq. mi. Low Grade Elev. 334.8 (exist.) 335.1 (prop.) @ Sta. 838+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E.	Head-Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	50	3560	1212	1109	336.6	0.23	0.25	336.83	336.85
Base	100	3940	1212	1109	336.9	0.19	0.22	337.09	337.12
Overtopping	5	2720	1050	1109	335.0	0.0	0.0	335.0	335.0
Max. Calc.	500								

Freq. Yr.	Overflow Structure Discharge	Prop. Opening	Over the road flow Discharge	Area below Headwater El.
50	1040	275	5093	2450
100	1220	275	5870	3735
℄	737	275	0	0

The approach roadway is designed for an overtopping flood of 5yr. frequency.

DESIGN STRESSES

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

PRECAST UNITS
f'c = 4,500 psi
f'c = 1,800 psi fc = 20,000 psi

PRECAST PRESTRESSED UNITS
f'c = 5,000psi
f'ci = 4,000psi
f's = 270,000psi (½" ϕ Strands)
f'si = 189,000psi (½" ϕ Strands)

Allow 25#/s' for future wearing surface.

Design Specification: 1977 AASHTO; 1978, 1979, 1980 and 1981 Interim Specifications.

LOADING HS 20-44

DESIGNED	[illegible]		
CHECKED	[illegible]		
DRAWN	[illegible]		
CHECKED	[illegible]		

May 19 1982
EXAMINED James J. Kaptain
ENGINEER OF BRIDGES AND STRUCTURES
PASSED
ENGINEER OF SPECIAL ASSIGN.
APPROVED
DIRECTOR OF HIGHWAYS

Revised: 8-27-82 R.D.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 2936	15BC-BR	Pulaski	68	11
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT -		

SHEET NO. 1
10 SHEETS

GENERAL NOTES

See Proposal for Boring Data.

All structural steel shall be shop painted with two coats of basic lead silica chromate paint.

Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07 (c) of the Standard Specifications and are included in quantity of structural steel.

The contractor shall drive one concrete test pile in a permanent location at the Pier as directed by the Engineer before ordering the remainder of piles.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by broomring. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamferred a minimum of ¼".

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, Grade 60.

Limits of Waterproofing Membrane System and Class I shall be from toe to toe of curbs and end to end of deck beams.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

Shoulder transition to wingwall shall be shaped with broken concrete. Cost incidental.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Superstructures	Each	1		1
* Temporary Bridge Complete (Truss Relocation)	Each			1
Bituminous Concrete Surface Course, Class I	Tons	42		42
Concrete Removal	Cu.Yd.		20	20
Protective Coat	Sq.Yd.	53		53
Class X-Concrete	Cu.Yd.	18.0	80.6	98.6
Precast Concrete Bridge Slab	Sq.Ft.	299		299
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq.Ft.	3817		3817
Structural Steel	Pound	4240		4240
Reinforcement Bars	Pound	200	6900	7100
Reinforcement Bars (Epoxy Coated)	Pound	490		490
Concrete Piles	Lin.Ft.		615	615
Test Pile Concrete	Each		1	1
Name Plates	Each	1		1
Preformed Joint Seal 2½"	Lin.Ft.	65		65
Portland Cement Mortar Fairing Course	Lin.Ft.	835		835
Waterproofing Membrane System	Sq.Yd.	402		402
Steel Railing, Type T-1	Lin.Ft.	322		322
Epoxy Crack Sealing	Lin.Ft.		25	25
Cofferdam Excavation	Cu.Yd.		213	213
Cofferdams	Each		1	1
Seal Coat Concrete	Cu.Yd.		57	57

Range 11W. 3rd P.M.

LOCATION SKETCH

* Alternate "A"
For Alternate "B": Temporary Bridge Complete 1 Each
See Special Provisions.

GENERAL PLAN
F.A.S. Rte. 2936 Over CACHE RIVER
F.A.S. Rte. 2936 (U.S. 51) Section 15BC-BR
PULASKI COUNTY
Sta. 829+89.15

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DRAWN - RJT/HAS	REVISED -		
CHECKED - MTD	REVISED -		
DATE - 05/10	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: | SHEET NO. 1 OF 10 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2936	14BR-1	PULASKI	68	36
		CONTRACT NO. 78071		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT AID		