STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 782	115BR-2	Hardin	83	62
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
10 SHEETS

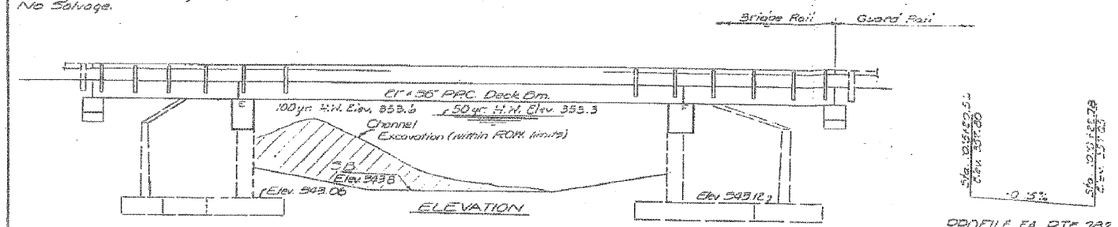
Contract #78026

B.M.: R.R. Spike in P.P. 40ft. Sta. 1021+35 Elev. 368.53
Existing Structure: Built as S.B.I. Rte 140 Sec. 115A Sta. 1015+72 in 1933. Superstr. R.C. Deck Girder with Substr. R.C. Closed Abutments. Contractor shall remove existing superstr. using staged construction. No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 86	115A DR-2	HARDIN	35	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
2 SHEETS



PROFILE F.A. RTE. 782
(Top of Class I)

GENERAL NOTES

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

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 brooming. The finished surface shall be free of depressions or high spots with sharp corners.

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.

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

Expansion bolts shall consist of self drilling expansion anchors and ¾"φ x 12" hooked bolts.

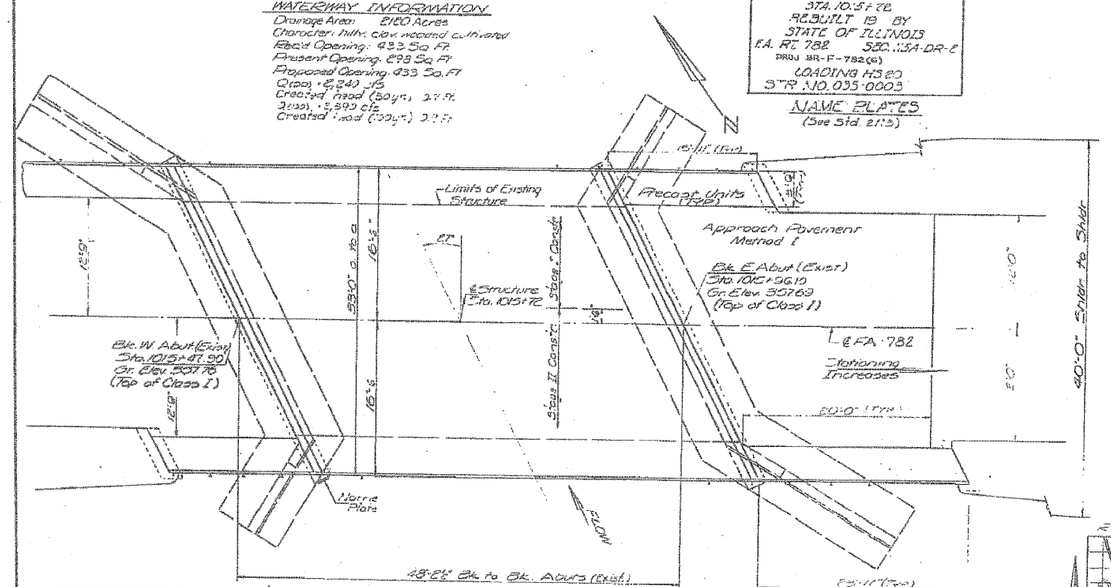
Shoulder transition to wingwall shall be shaped with broken concrete. Cost incidental.

WATERWAY INFORMATION

Drainage Area: 2150 Acres
Character: hilly, clay, wooded, cultivated
Relief Opening: 433 Sq. Ft.
Present Opening: 298 Sq. Ft.
Proposed Opening: 433 Sq. Ft.
Q100: 2,240 cfs
Created head (50 yr.): 3.7 ft.
Q200: 2,899 cfs
Created head (100 yr.): 3.2 ft.

STA. 1015+72
REBUILT 19 BY
STATE OF ILLINOIS
F.A. RT. 782 SEC. 115A-DR-2
PROJ. BR-F-782(6)
LOADING H320
STR. NO. 035-0003

NAME PLATES
(See Std. 2113)



PLAN

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Class X Concrete	Cu. Yds.	2.9	26.3	29.2
Reinforcement Bars	Lbs.	120	4090	4210
Concrete Removal	Cu. Yds.		12	12
Expansion Bolts (¾")	Each		36	36
Precast Concrete Bridge Slab	Sq. Ft.	298		298
Precast Prestressed Conc. Dk. Bms. (21")	Sq. Ft.	1289		1289
Steel Railing Type 3	Lin. Ft.	170		170
* Bit. Conc. Surf. Course Class I	Tons	28		28
Structural Steel	Lbs.	2600		2600
Removal of Exist. Superstructure	Each	1		1
Waterproofing Membrane System	Sq. Yds.	178		178
Name Plates	Each		1	1
Preformed Joint Seals 2½"	Lin. Ft.	37		37
Temporary Bridge Rail	Lin. Ft.	112		112
Portland Cement Mortar Parking Cse	Lin. Ft.	681		681

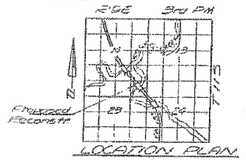
* Bk. to Bk. Exist. Abuts.

DESIGN STRESSES

FIELD UNITS
fc = 1000 psi Sub.
fs = 20,000 psi Reinf.
fs = 20,000 psi Struct.
v = 75 psi Pigs.
n = 10

PRECAST PRESTRESSED UNITS
fc = 5000 psi
fc = 4000 psi
fs = 270,000 psi (Strands)
fs = 189,000 psi (Strands)

Design Specifications 1969 AASHO (as applicable)
LOADING H320-44



LOCATION PLAN

DESIGNED
CHECKED
J. BOHNSTEDT
DRAWN F. FERNANDO
CHECKED J.P.
EXAMINED
PASSED
APPROVED

REV. 10-25-79

N.V. to H. 3-1-75 REV. J.S. 3-21-77 REV. J.S. 9-28-77

GENERAL PLAN & ELEVATION
F.A. 782 over TRIB. of ROCK CREEK
F.A. RTE. 782 SEC. 115A-DR-2
HARDIN COUNTY
STA. 1015+72

035-0003

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400
ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-98-0016-i		DATE: 01/18/08
DESIGNED: M.D.C.	CHECKED: P.S.L.	DRAWN: D.T.M.

EXISTING STRUCTURE PLANS

IL. ROUTE 1 OVER BRANCH OF ROCK CREEK
F.A.P. ROUTE 782 / SECTION 115BR-2
HARDIN COUNTY
STATION 1015+72
STRUCTURE NO. 035-0003