BENCH MARK

R.R. Spike in P.P. on E. Side of IL Rte. 78, (±) 1500' south of Bridge. Elev. 742.88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78	(10 BR-3)D & (11BR-8)	JO DAVIESS	45	19
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
9 SHEETS

Contract # 64B27

Existing Structure: SN 043-0040 was built in 1982 as FA Rte 642 Section 10 BR-3 at Sta. 779+14.00

The structure consist of two simple span PPC Deck Beams on pile bent abutments and solid pier on spread footing. The back to back abutment dimension is 155'-6" while the out to out width measures 36'-0".

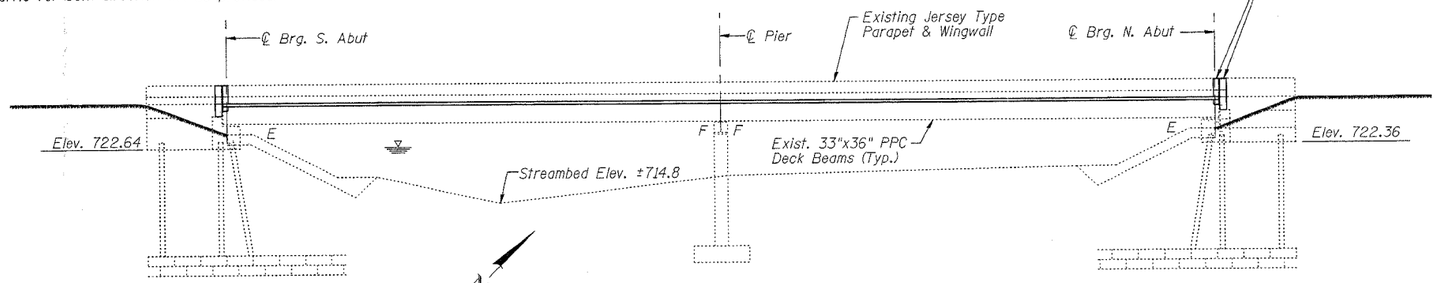
The wearing surface of the existing superstructure is to be replaced with 5" (min.) concrete wearing surface.

Traffic is to be maintained by utilizing Stage construction. One lane of traffic for both direction will be provided.

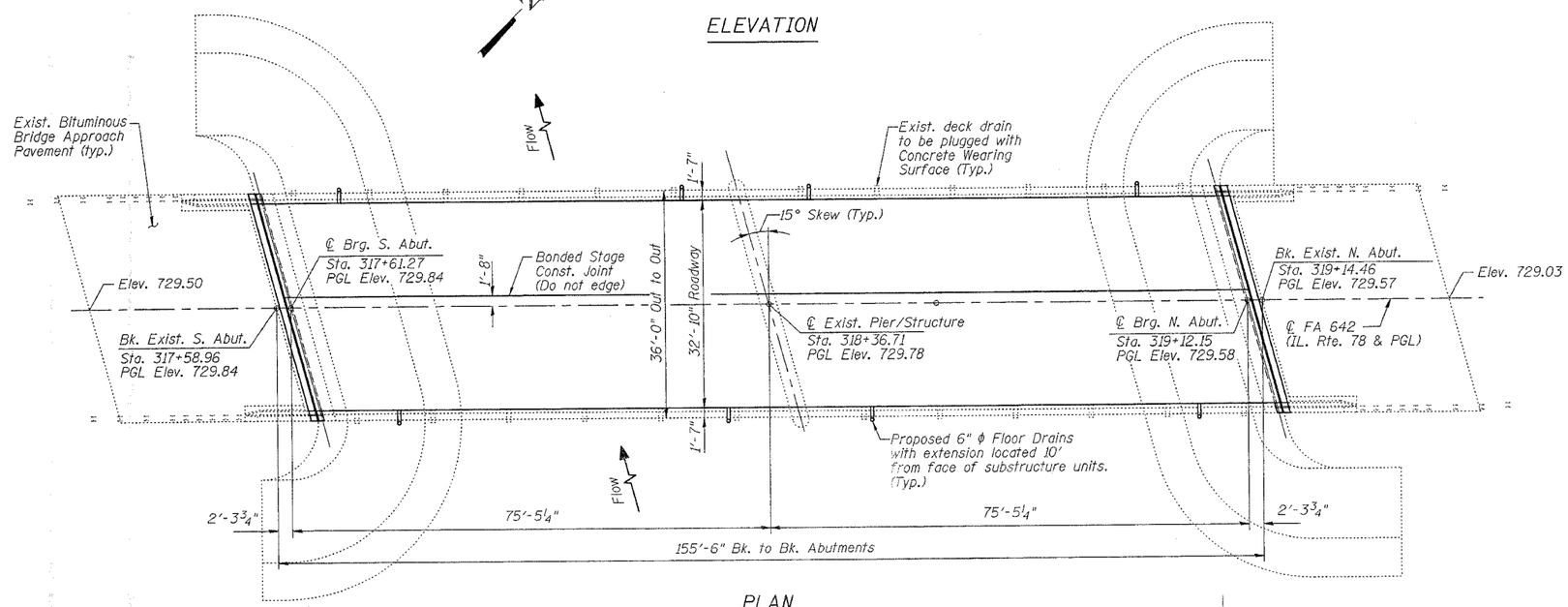
No salvage.

Index of Sheets

1. General Plan & Elevation
2. Construction Staging
3. Superstructure Plan
4. Superstructure Details - 1
5. Bridge Joint System - Expansion (Preformed Joint Seal)
6. Bridge Joint System - Expansion (Alternate - Strip Seal)
7. Substructure Concrete Removal, Repair & Details
8. North & South Abutment Details
9. Bar Splicer



ELEVATION



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	2.1	6.0	8.1
Concrete Structure	Cu. Yd.	-	6.3	6.3
Concrete Superstructure	Cu. Yd.	2.7	-	2.7
Formed Concrete Repair (D>5")	Sq. Ft.	-	21.0	21.0
Reinforcement Bars, Epoxy Coated	Pound	7350	780	8130
Concrete Wearing Surface, 5"	Sq. Yd.	548.5	-	548.5
Bridge Deck Grooving	Sq. Yd.	515	-	515
Protective Coat	Sq. Yd.	556	10	566
Bit. Conc. Surface Removal Complete	Sq. Yd.	555.0	-	555.0
Bar Splicer	Ea.	153	8	161
Bridge Joint System (Expansion) -1"	Foot	74.6	-	74.6
Floor Drain Extension	Each	8	-	8
Floor Drains	Each	8		8

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

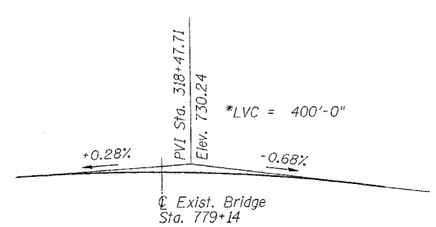
DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

NEW & EXISTING CONSTRUCTION
FIELD UNITS
f'c = 5,000 psi (concrete wearing surface)
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

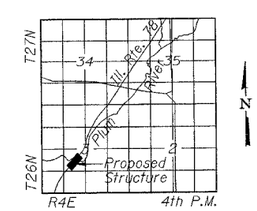
STATE OF ILLINOIS
EFREN M. MIRANDA
81-3957
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER
12/20/05
Exp. 11/20/06



PROFILE GRADE

(Along ℄ of Rte 78)

*Vertical Curve data is only valid from Sta. 317+58.96 to Sta. 319+14.46. Beyond those limits, see Roadway Plans for bituminous tapes to meet existing grades.



LOCATION SKETCH

GENERAL PLAN & ELEVATION

IL. RTE. 78 OVER
PLUM RIVER
F.A. 642 SECTION (10BR-3)D & 11BR-8
JO DAVIESS COUNTY
STA. 318+36.71
STRUCTURE NUMBER 043-0040

DATE: 12-21-05

DESIGNED	JPM
CHECKED	EMM
DRAWN	RLH, JPM
CHECKED	EMM

- 200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

K:\structural\IL RTE 78\0460 PLUM RIVER\SHEETS FILE:PLUMVRPLGPE.dgn
ldd/7.0 04
ch/5mb
12/20/2005