ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	"NE"	SHEET NO. 1
F.A.I. 74	74-2B BR	PIATT			2 SHEETS

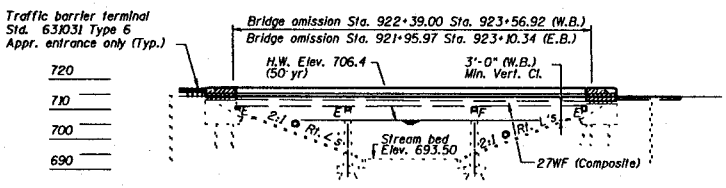
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Bench Mark: Chiseled "□" Southwest corner top step of Southeast wingwall North Bridge (074-0038) 4501-10 Elev. = 716.48

Existing Structure NO. 074-0037 (E.B.) & 074-0038 (W.B.)

Three Span 35'-3", 41'-4" and 35'-3", 117'-3" Bk. to Bk. Abutment 42'-0" O. TO O. R.C. Slab Bridge on pile bent spill thru Abutment & pile supported solid piers. Built as FAI Route 74 Section 74-2B at Station 922+77 in 1970.
The Contractor shall remove existing R.C. deck Slab and Bearings. Existing Steel beams shall be raised and all steel structure shall be cleaned and painted. The road shall be kept open one lane traffic in each direction at all times by utilizing stage construction. Existing substructure to remain in place.

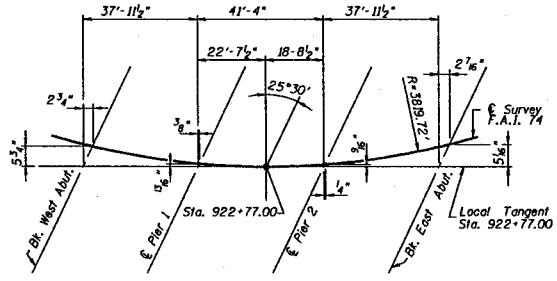
No salvaged.



ELEVATION

CURVE DATA

Δ = 41°37'39" (RT)
R = 3819.72'
T = 1452.02'
L = 2775.16'
E = 266.68'
D = 1°30'
S.E = 0.042 ft/ft
PC Sta. 898+32.90
PI Sta. 912+84.92
PT Sta. 926+08.06
SE Attained Sta. 897+00 to Sta. 899+00
SE Removed Sta. 927+41 to Sta. 925+41



OFFSET SKETCH

HIGHWAY CLASSIFICATION

F.A.I. Rte 74 - I-74
Functional Class: Interstate
ADT: 19,000 (1997), 28,000 (2017) (Two way)
Design Speed: 70 mph
Posted Speed: 65 mph
DHV: 3100 (2017)
ADTT: 26.1 %

DESIGN SPECIFICATIONS

AASHTO 1996 & 1997 thru 2001 Interims

LOADING HS20 & ALT.

Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS

NEW CONSTRUCTION
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

EXISTING STRUCTURE
fy = 36,000 psi (Structural Steel)

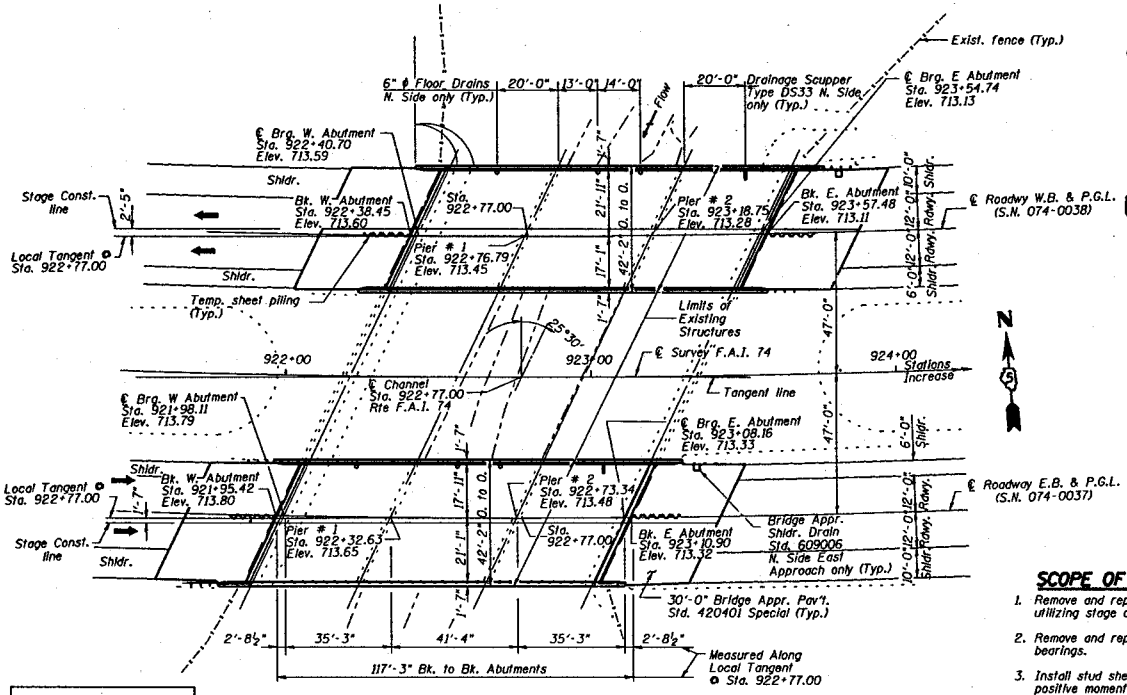
SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4.6 % g
Site Coefficient (S) = 1.2

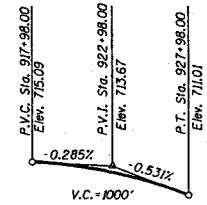
APPROVED

MAY 16 2002

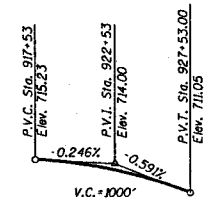
AS A BASIS FOR
PREPARATION OF DETAILED PLANS



PLAN



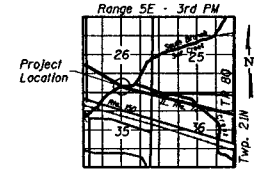
PROFILE GRADE
(along ℄ W.B. Roadway)



PROFILE GRADE
(along ℄ E.B. Roadway)

SCOPE OF WORK

1. Remove and replace existing deck utilizing stage construction.
2. Remove and replace all bearings.
3. Install stud shear connectors in positive moment areas of existing beams.
4. Remove and replace approach slabs & Abut. Bk. walls.
5. Reconstruct wing walls.
6. Raise Superstructure ±0'-9".



LOCATION SKETCH

DESIGNED	J. SVANY
CHECKED	S. PINJARKAR
DRAWN	J. SHAH
CHECKED	D. ROY

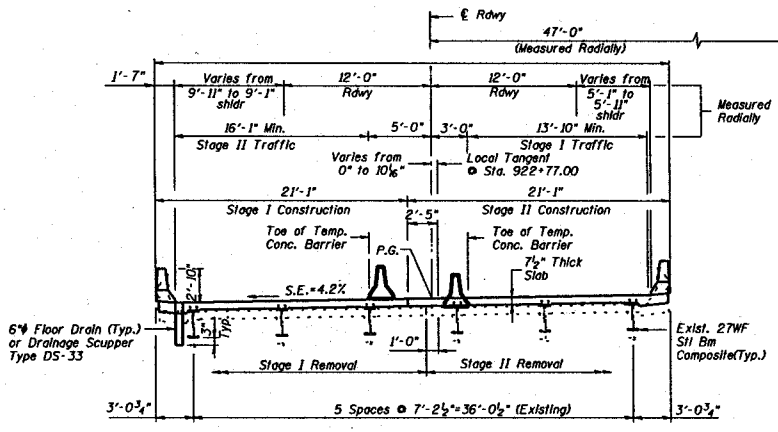
GENERAL PLAN

FAI ROUTE 74 OVER
SOUTH BRANCH SALT CREEK
F.A.I. Rte. 74 - SECTION (74-2B) BR
PIATT COUNTY
STA. 922+77.00
STRUCTURE NO. 074-0037 (E.B.)
STRUCTURE NO. 074-0038 (W.B.)

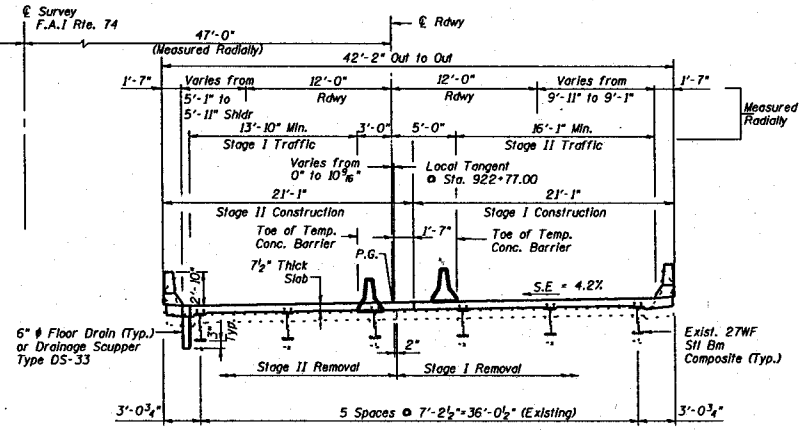
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(74-2B) BR	PIATT		

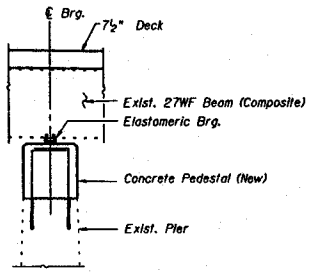
SHEET NO. 2
2 SHEETS



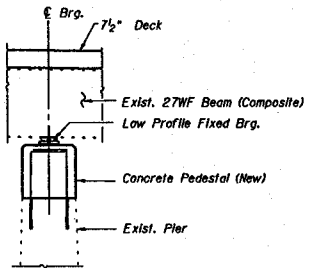
CROSS SECTION
Looking East for SN. 074-0038 (W.B.)
Horiz. Dim. @ Rt. L's except as noted



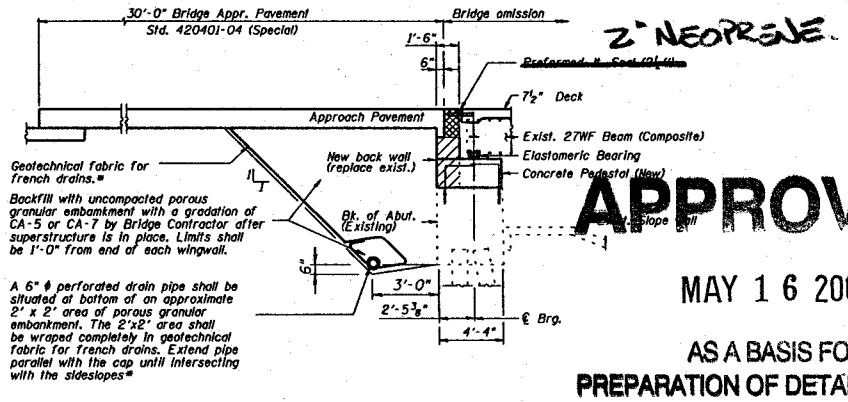
CROSS SECTION
Looking East for SN. 074-0037(E.B.)
Horiz. Dim. @ Rt. L's except as noted



SECTION THRU PIER 1



SECTION THRU PIER 2



TYPICAL SECTION THRU EXIST. ABUTMENT
(Dimensions @ Rt. L's)

* Included in the Cost of Porous Granular Embankment.

APPROVED
MAY 1 6 2002
AS A BASIS FOR
PREPARATION OF DETAILED PLANS

DESIGNED	J. SHAHY
CHECKED	S. PINJARKAR
DRAWN	J. SHAH
CHECKED	D. ROY

SUPERSTRUCTURE DETAILS

FAI ROUTE 74 OVER
SOUTH BRANCH SALT CREEK
F.A.I. Rte. 74 - SECTION (74-2B) BR
PIATT COUNTY
STA. 922+77.00
STRUCTURE NO. 074-0037 (E.B.)
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