

**GENERAL NOTES**

EXTRA TRAFFIC CONTROL DEVICES MAY BE REQUIRED TO CHANNEL TRAFFIC AT COMMERCIAL AND/OR PRIVATE ENTRANCE AS DIRECTED BY THE ENGINEER. ALL TRAFFIC CONTROL DEVICES ARE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION STANDARD USED AT THE SITE, AND WILL NOT BE PAID FOR SEPARATELY.

THE CONTRACTOR IS REQUIRED TO BE SSPC QP1 CERTIFIED.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION 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 SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

TRAFFIC CONTROL SIGNS SHALL BE PLACED SO THAT THEY DO NOT INTERFERE WITH EXISTING SIGNS OR FLASHING BEACONS. THE DIMENSIONS BETWEEN SIGNS MAY BE MODIFIED SLIGHTLY SO AS TO AVOID CONFLICTS WITH EXISTING SIDE ROADS, COMMERCIAL ENTRANCES, AND PRIVATE ENTRANCES. THE BUREAU OF OPERATIONS SHOULD APPROVE FINAL PLACEMENT OF TRAFFIC CONTROL SIGNING.

IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT AS DEFINED IN ARTICLE 101.16 REGARDLESS IF TRACK MOUNTED OR WHEELED.

CLEANING AND PAINTING OF ALL EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES" AND "CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES." ALL BEAMS, BEARINGS, AND OTHER STRUCTURAL STEEL WITHIN 5 FT. (MEASURED ALONG THE BEAM) OF EITHER SIDE OF SPECIFIED DECK JOINTS SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING - SSPC-SP10 AND PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR BOTH INTERIOR AND EXTERIOR SURFACES SHALL BE REDDISH BROWN, MUNSELL NO. 2.5YR 3/4.

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES
3	SUMMARY OF QUANTITIES
* 4, 5	SN 035-0004 STRUCTURE INFORMATION
6, 7	SN 035-0006 STRUCTURE INFORMATION
8-10	SN 030-0021 STRUCTURE INFORMATION
11-13	SN 030-0020 STRUCTURE INFORMATION



\* DELETE DUPLICATE SHEETS 9 - 13 AND REPLACE WITH NEW SHEETS 4-8.

**STANDARDS**

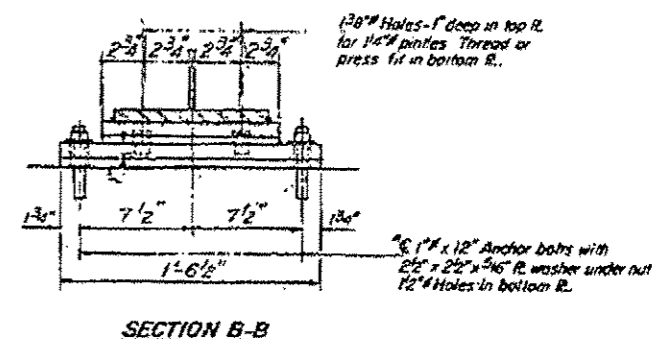
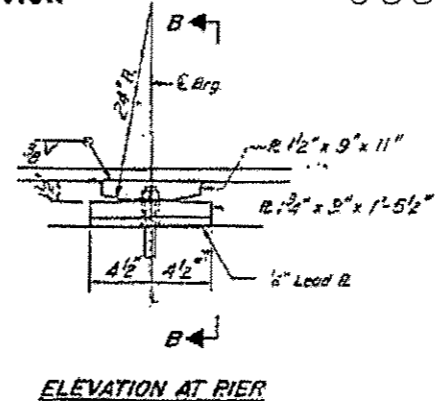
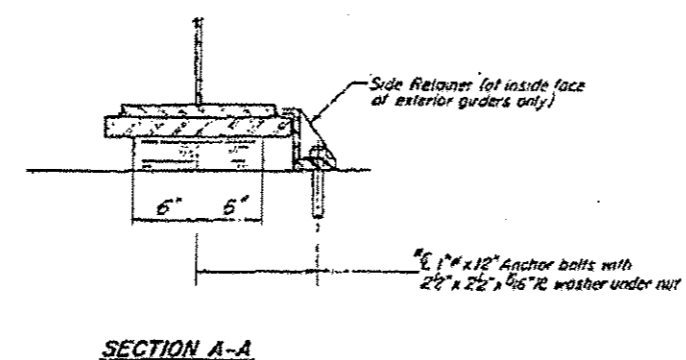
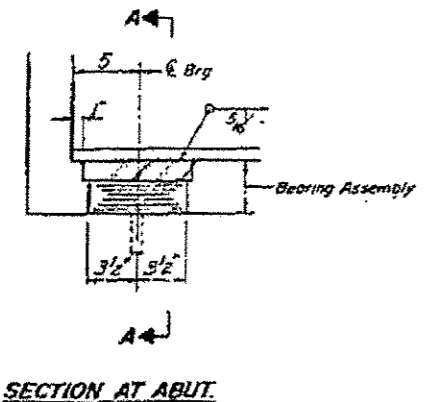
- 701101-04 OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600mm) FROM PAVEMENT EDGE
- 701106-02 OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
- 701201-04 LANE CLOSURE, 2L, 2W, DAY-ONLY
- 701901-03 TRAFFIC CONTROL DEVICES

Prepared By:	<i>Joe Zlotnick</i> DISTRICT STUDIES & PLANS ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT LAND ACQUISITION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT OPERATIONS ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT PROJECT IMPLEMENTATION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT CONSTRUCTION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT MATERIALS ENGINEER

⚠ REVISED 6-3-14

FILE NAME *	USER NAME * Dahmer,ja	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, STANDARDS, GENERAL NOTES</b>	F.A.2	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
os\pw\work\p\dot\dahmer\ja\0382426\78	08-shit-plan.dgn	DRAWN -	REVISED -			VAR.	09 BRIDGE PAINT 2014-1	*	13	2	
Default	PLOT SCALE * 100.0000' / 1in.	CHECKED -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
	PLOT DATE * 3/13/2014	DATE -	REVISED -								
ILLINOIS FED. AID PROJECT * GALLATIN AND HARDIN											
CONTRACT NO. 78418											





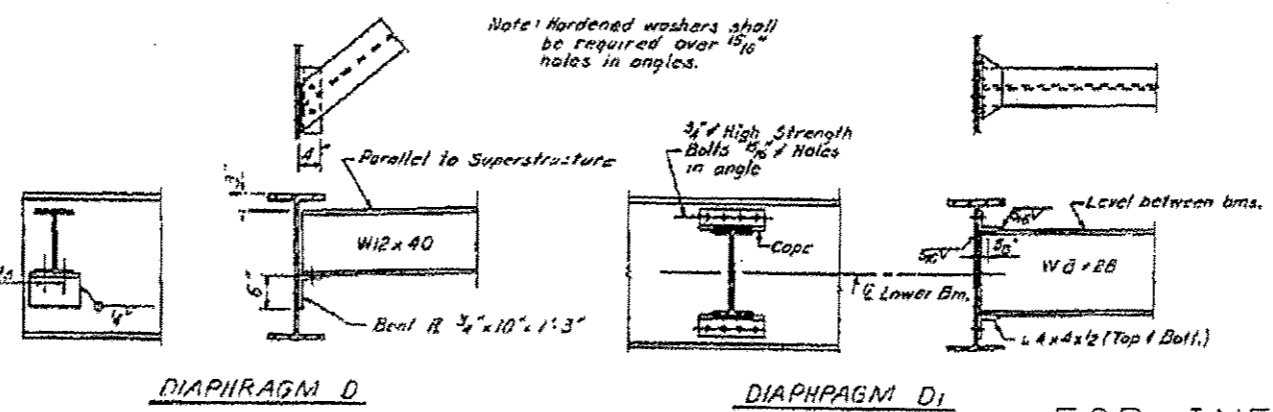
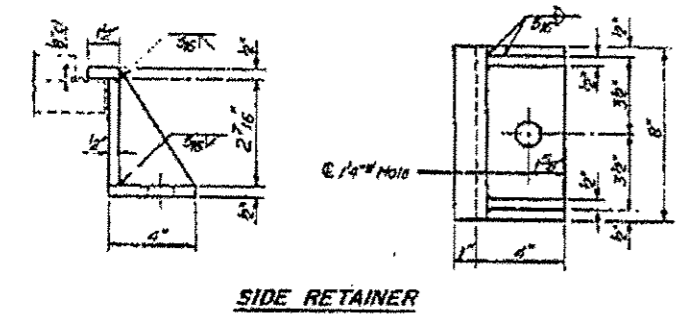
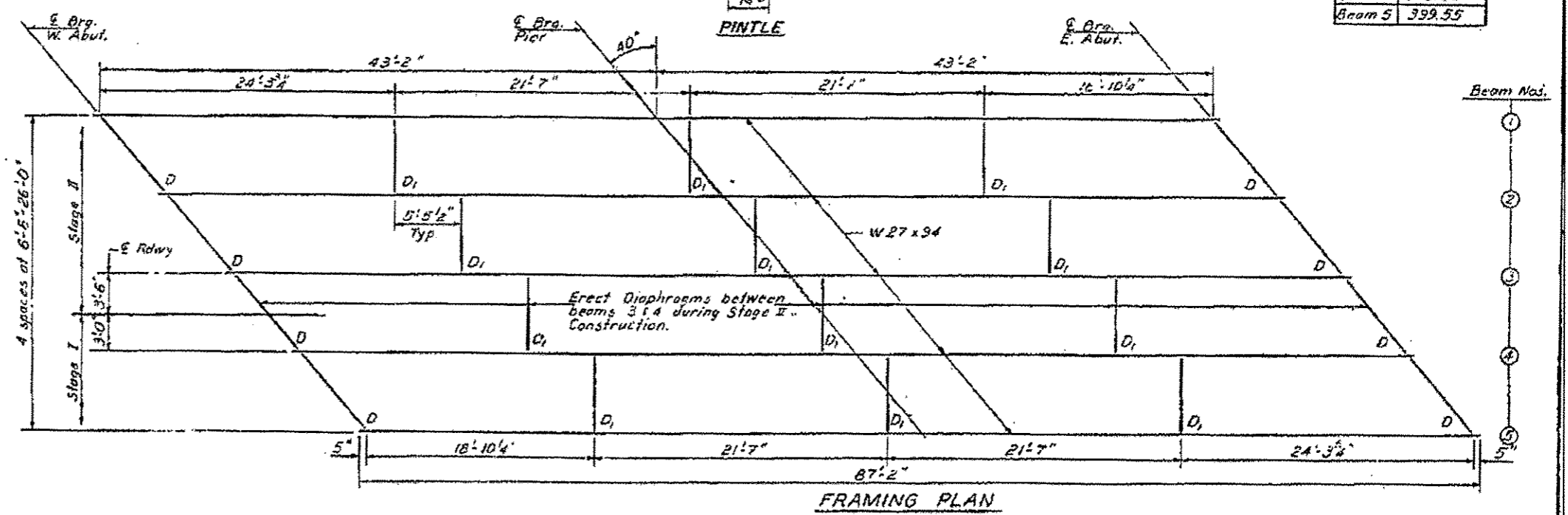
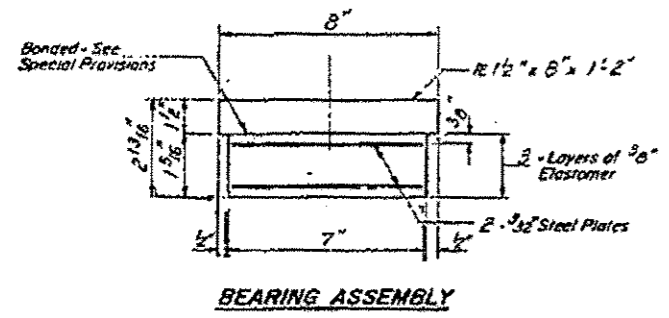
**TYPE I ELASTOMERIC EXP. BRG.**

**FIXED BEARING**

**TOP OF BEAM ELEVATIONS**

Beam 1	398.56
Beam 2	396.81
Beam 3	399.05
Beam 4	399.30
Beam 5	399.55

Note: After beams have been erected holes of expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be bolted into the masonry.



**INTERIOR BEAM MOMENT TABLE**

	0.4 Sp. 1	Pier
I (k-ft)	3270	3270
Q (k-ft)	0.9707	0.9707
M <sub>0</sub> (k-ft)	127.01	226.87
M <sub>1</sub> (k-ft)	238.49	176.31
Imp. (k-ft)	71.55	52.89
M <sub>max</sub> (k-ft)	437.05	456.07
F <sub>s</sub> (k-ft)	21.38	22.52

**INTERIOR BEAM REACTION TABLE**

	Abut.	Pier
R <sub>B</sub> (k)	15.74	52.46
R <sub>1</sub> (k)	91.56	39.82
Imp. (k)	9.47	11.95
Total (k)	56.77	104.23

DESIGNED: *[Signature]*  
 CHECKED: *[Signature]*  
 DRAWN: R. P. Summer  
 APPROVED: *[Signature]*  
 DIRECTOR OF HIGHWAYS

**STRUCTURAL STEEL**  
 E.A. RT.778 SEC. 3B-DR  
 HARDIN COUNTY  
 STA. 783+80.00

FOR INFORMATION ONLY

B.M.: R.R. Spike in Power Pole 25' Rt. Sta. 867+35  
Elev. 423.27.  
Existing structure N1035-0006, built as S.B.I.  
Rt. 34, Sec. 3B in 1924, 2 spans R.C. also on R.  
C. closed abutments & pier. The contractor  
shall remove the existing superstructure in  
stages and provide a new superstructure  
with 24" W Flange Beams. Repair and rebuild  
the pier & abutments as required. One way  
traffic shall be maintained at all times  
using stage construction.  
No salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

035-0006

DATE	BY	CHKD	APP'D
10/23/14	J. Doherty	J. Doherty	J. Doherty

GENERAL NOTES

Revisions shall be kept through hole. Date 8/28/14. Item 1/2. Issues  
after 10/23/14.

Construction grade of Structure Slab = 1736016a.  
All structural steel shall be AASHTO M-222 superior metal minimum  
yield strength and tensile strength shall be AASHTO M-183 and shall conform  
with the grade of beam used unless otherwise noted.

Plans showing of construction dimensions will not be permitted to the bottom  
range of beams or girders nor to the top flange for a distance equal to one-half  
the beam length past any from the pier supports. Plans showing other areas will  
be permitted only when approved by the Engineer.

Final bids shall be for full bridge including abutments over supports.  
It shall be the responsibility of the Contractor to verify all dimensions and  
conditions existing in the field prior to construction and starting of materials.  
Expansion joints shall consist of half width expansion sections and 1/4" of  
rolled bars.

Bearing steel surfaces shall be prepared or adjusted to the designated  
elevations within a tolerance of 1/8" in. Adjustment shall be made either by  
grinding the surface or by shimming the bearing. Two 1/2" x 1/2" x 1/2" steel  
of the dimensions of the bottom bearing plate, shall be provided for each bearing in  
addition to all other plates or shims.

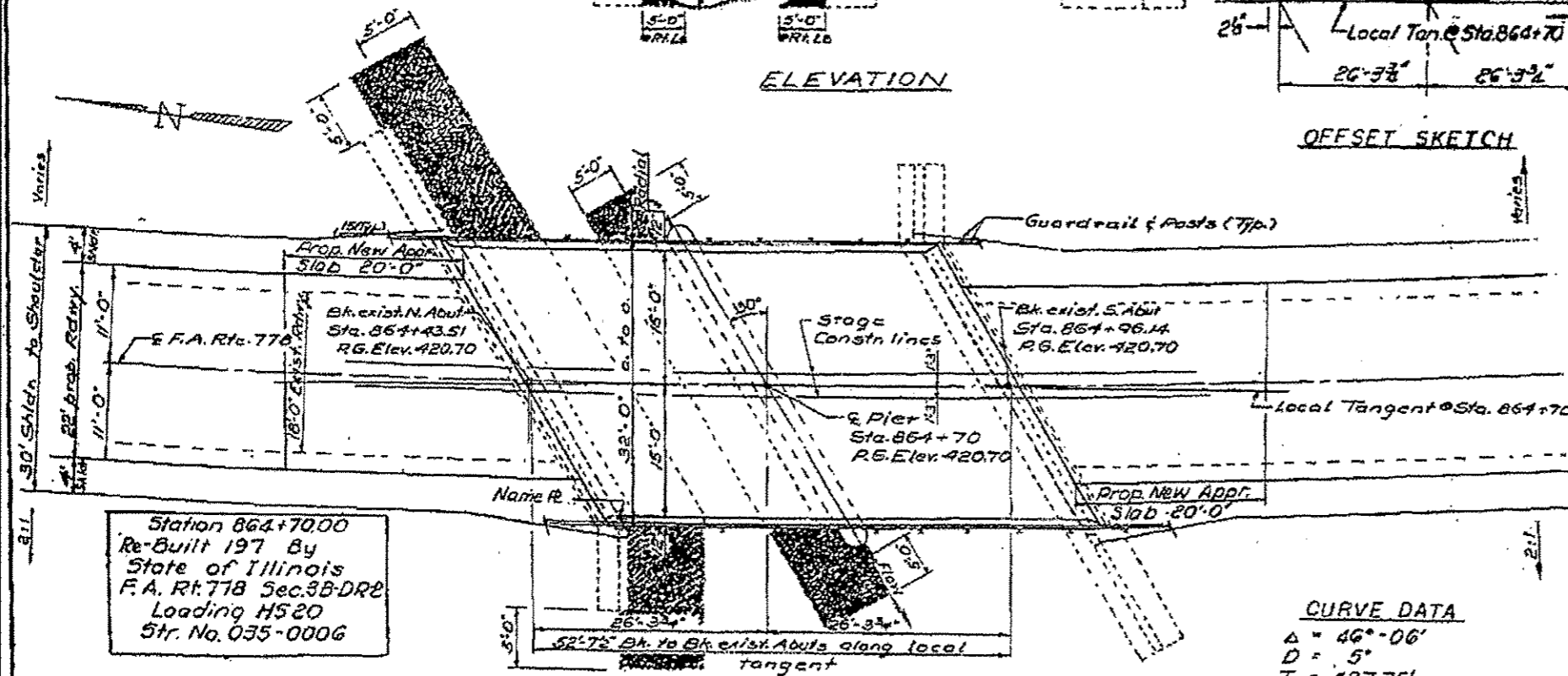
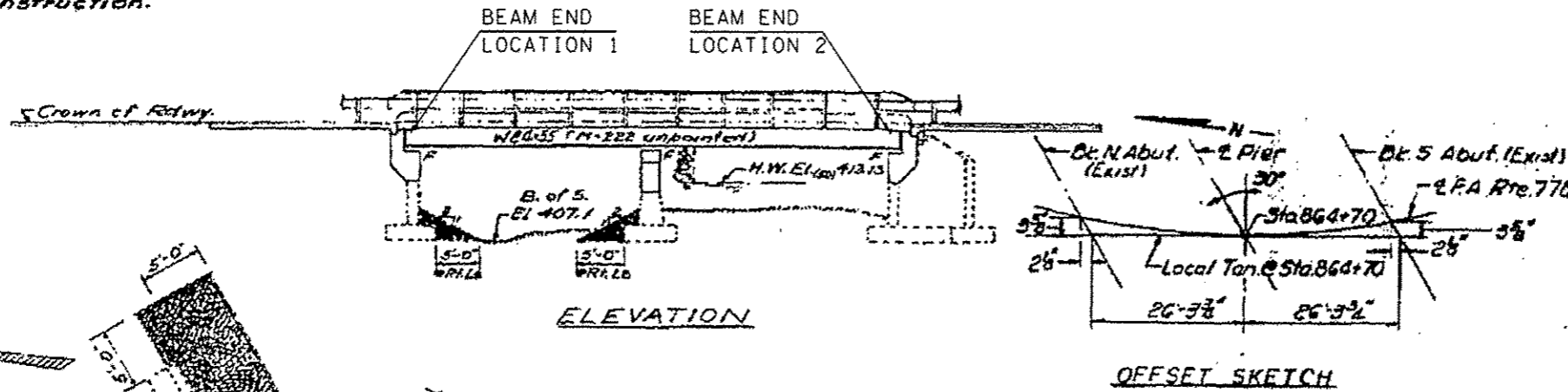
The main load carrying member components subject to tensile stress shall  
conform to the Supplemental Requirements for Hot Rolled Steel Grade 50. These  
Components are the tension flanges, webs and all brace plate material in the  
steel girders or web flange beams.

Protective coat shall be applied to deck surface,  
inside faces and top faces of curb.  
Reinforcement bars shall conform to the require-  
ments of AASHTO M-31 Grade 60.

TOTAL BILL OF MATERIALS

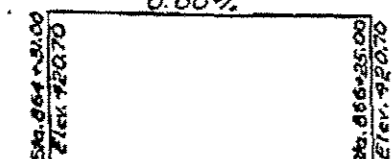
Item	Unit	Super	Sub	Total
Removal of Existing Superstructure	Each	1		1
Class X Concrete	Cu Yds	457	431	888
Reinforcement Bars	Lbs	5960	3980	9940
Reinforcement Bars (Epoxy Coated)	Lbs	10200		10200
Structural Steel	L.S.			28
Protective Coat	Sq Yds	201		201
Temporary Guardrail	Lin Ft	55		55
Concrete Removal	Cu Yds		222	222
Expansion Bolts 1/2" x 9"	Each		33	33
Steel Railing T x T	Lin Ft	110		110
Name Plate	Each	1		1

Note: Adequate struts shall be placed at the abutments  
before existing superstructure is removed and shall  
remain in place until new superstructure has been erected  
to prevent damage to abutments from unrestrained earth  
pressure. Cost incidental.



Station 864+70.00  
Re-Built 197 By  
State of Illinois  
F.A. Rt. 778 Sec. 3B-DR-2  
Loading H520  
Str. No. 035-0006

NAME PLATE



WATERWAY INFORMATION

Drainage Area 148 Sq. Miles  
Existing Opening 169 Sq. Ft.  
Required Opening 169 Sq. Ft.  
Proposed Opening (allow 50% H.W.E.) 169 Sq. Ft.

H.W.E. (50) = 413.13'  
Q (50) = 1090 cfs  
Created Head - Negligible

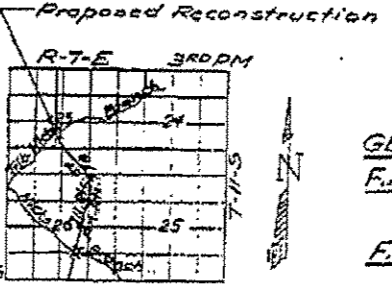
H.W.E. (100) = 413.5'  
Q (100) = 1260 cfs  
Created Head - Negligible

CURVE DATA

Δ = 46°-06'  
D = 5'  
T = 487.75'  
L = 922'  
R = 1146.28'  
E = 99.42'  
Prop. S.E. = 0.08 F/ft.  
Attain S.E. Sta. 862+15 to  
Sta. 864+31

DESIGN STRESSES

f<sub>c</sub> = 3,500 psi.  
f<sub>y</sub> = 60,000 psi. (Reinf.)  
f<sub>y</sub> = 50,000 psi. (Struct.) M-222 Gr. 50  
f<sub>y</sub> = 36,000 psi. M-183  
Loading H520-44  
Allow 25 #/ft<sup>2</sup> for Future W.S.  
Design Specifications: 1973 AASHTO, 1974, 1975, 1976  
and 1977 Interim Specifications.  
\*\* Epoxy Coated Reinf. Bars shall be used  
in the top layer of the slab.



GENERAL PLAN & ELEVATION  
F.A. RTE. 778 OVER TRIB. HICKS  
BRANCH  
HARDIN COUNTY  
STA. 864+70.00

LOCATION SKETCH  
FOR INFORMATION ONLY

FILE NAME: c:\pwwork\pvidot\doherty\0302426\78418\1\plandgr	USER NAME: Doherty, J	DESIGNED: [Signature]	REVISED: [Signature]
		DRAWN: [Signature]	REVISED: [Signature]
		CHECKED: [Signature]	REVISED: [Signature]
		DATE: 5/29/2014	REVISED: [Signature]

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

035-0006  
IL 34 OVER HICKS BRANCH  
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. 09	BRIDGE PAINT 2014-1	HARDIN	13	6
				CONTRACT NO. 78418

NEW SHEET 6-3-14

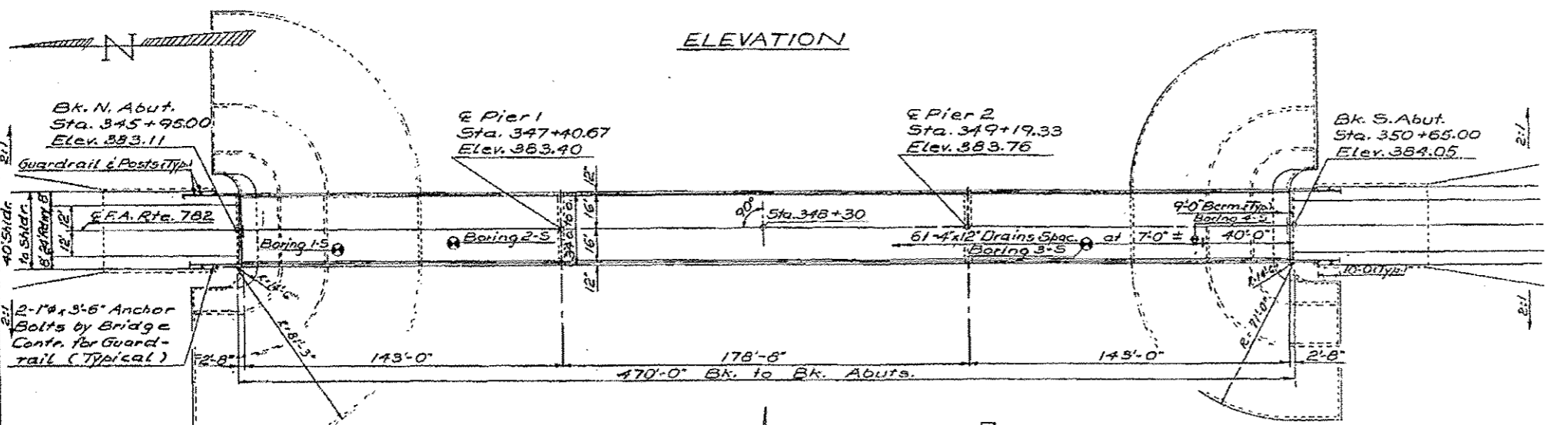
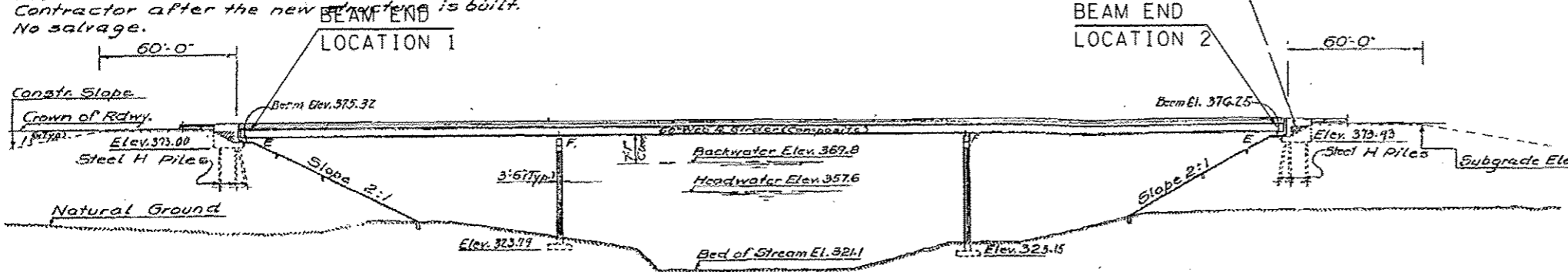


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

030-0021

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. / TOTAL SHEETS
782	113-1B	Gallatin	74	33	13 SHEETS

B.M.: R.R. Spike in twin 16" Pecan 42' Rt. Sta. 352+60 Elev. 363.09.  
Existing Structure: \*030-0006 Built as S.B.I. Rte. 140, Sec. 113-B, at Sta. 348+48 in 1931. The existing 8-I beam spans and one truss span superstructure on pile bents and R.C. Piers substructure shall be removed by the Contractor after the new structure is built. No salvage.

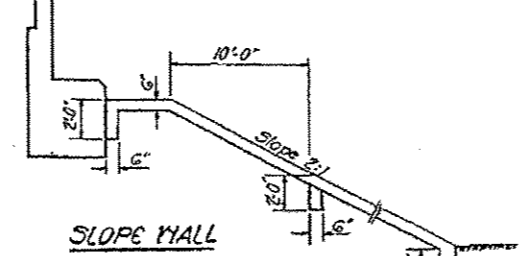


STATION 348+30  
BUILT 197 BY  
STATE OF ILLINOIS  
F.A. RTE. 782 SEC. 113-1B  
LOADING HS 20  
\*STR. NO.

NAME PLATE  
(See Std. 2113)  
\* Structure Number to be supplied by District.

**WATERWAY INFORMATION**

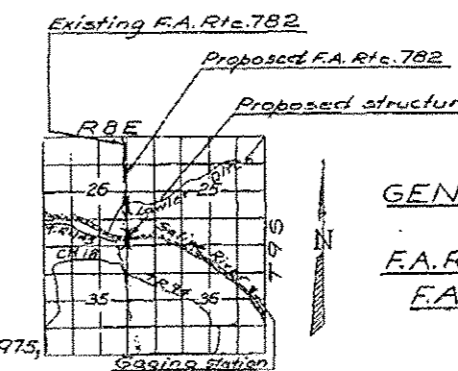
	Lawler Ditch	Saline River	Both Structures
Drainage Area	3.32 sq. mi.	101868 sq. mi.	1022 sq. mi.
Required Opening	1773 sq. ft.	8425 sq. ft.	10,198 sq. ft.
Proposed Opening	1773 sq. ft.	8425 sq. ft.	10,198 sq. ft.
Headwater Elev. (50)	357.6	357.6	357.6
Q <sub>50</sub>	6046 c.f.s.	36154 c.f.s.	42200 c.f.s.
Headwater Elev. (100)	359.4	359.4	359.4
Q <sub>100</sub>	7013 c.f.s.	44687 c.f.s.	51,700 c.f.s.
Backwater Elev. (50)	369.8	369.8	369.8
Created Head (50)	0.15'	0.15'	0.15'
Backwater Elev. (100)	372.4	372.4	372.4
Created Head (100)	0.23'	0.23'	0.23'



**DESIGN STRESSES**

fc = 3500 psi  
fy = 60,000 psi (Reinf.)  
fy = 50,000 psi (Struct.)

Loading HS20-44  
Allow 25% W/O for Future W.S.  
Design Specifications: 1973 AASHTO (1974, 1975, 1976 and 1977 Interim Specifications.  
\*\* Epoxy Coated Reinf. Bars shall be used in the top layer of the slab.



**GENERAL NOTES**

Fasteners shall be high strength bolts. Bolts 3/4" dia, open holes 1 1/8" unless otherwise noted.  
Calculated weight of Structural Steel = 521390 lbs.

Anchor bolts shall be set before bolting cross frames over supports.  
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 sq. ft.  
Layout of slope walls may be varied in the field to suit ground conditions as directed by the Engineer.

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

All structural steel shall be AASHTO: M 222 unpainted.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ± 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

Protective coat shall be applied in accordance with Art. 503.12 of Standard Specifications.

For borings see Proposal.  
The Contractor shall drive 1 (one) steel test pile (HP10-42) in a permanent location of North abutment as directed by the Engineer before ordering the remainder of piles.

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub	Total
Removal of Existing Structures	Each			1
Class X Concrete	Cu. Yds.	483.3	441.6	924.9
Reinforcement Bars (Epoxy coated)	Lbs.	74370		74370
Reinforcement Bars	Lbs.	51650	61440	113090
Steel Piles (HP10-42)	Lin. Ft.		1074	1074
Test Piles (HP10-42)	Each			1
Name Plates	Each			1
Stud Sheat Connectors	Each	3120		3120
Neoprene Expansion Jt. (4")	Lin. Ft.	66		66
Protective Coat	Sq. Yds.	6005		2005
Structural Steel	L.S.			1.5
Slope Wall (6")	Sq. Yds.		3060	3060
Structure Excavation	Cu. Yds.		473	473
Rock Excavation for Structures	Cu. Yds.		14	14

**GENERAL PLAN & ELEVATION PROJECT:**  
F.A. RTE. 782 OVER SALINE RIVER  
F.A. RTE. 782 SECTION 113-1B  
GALLATIN CO.  
STA. 348+30.00

DESIGNED: [Signature]  
CHECKED: [Signature]  
DRAWN: V.H. S.V.  
CHECKED: [Signature]

EXAMINED: [Signature]  
PASSED: [Signature]  
APPROVED: [Signature]

SEPTEMBER 26 1977



FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	030-0021	IL 1 OVER SALINE RIVER	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pwork\pwork\dahmer\jv\0302426178-8-shr-plan.dgn	Dahmer	-	-	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	030-0021	IL 1 OVER SALINE RIVER	782	113-1B	GALLATIN	74	33
Default		DATE	REVISION	SCALE: SHEET OF SHEETS STA. TO STA.			VAR. 09 BRIDGE PAINT 2014-1				CONTRACT NO. 78418

NEW SHEET 6-3-14