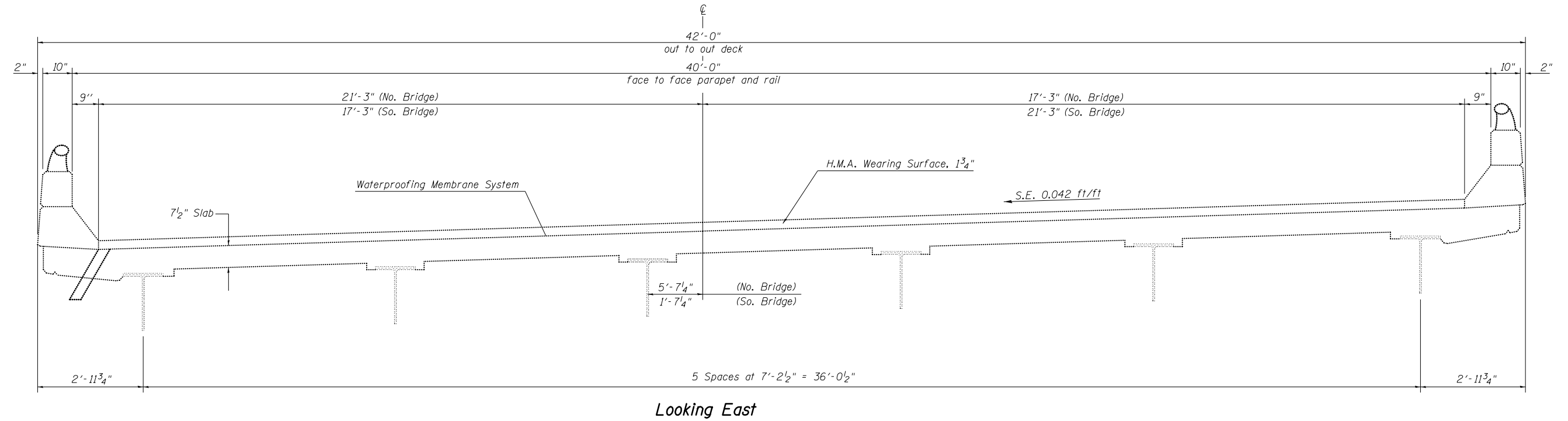
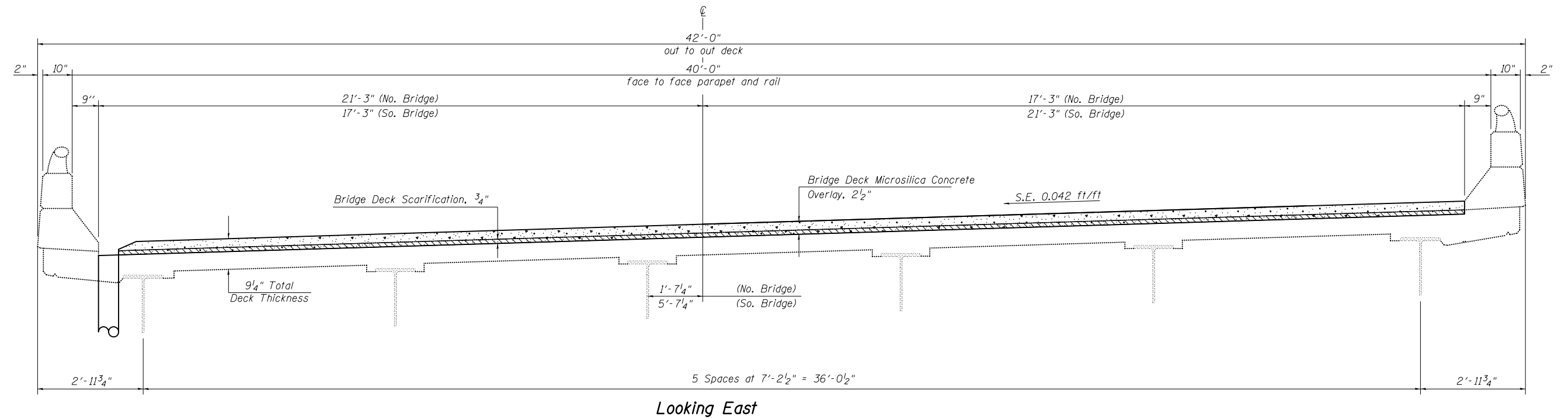


EXISTING CROSS SECTION S.N. 074-0037 (EB) & S.N. 074-0038 (WB)



PROPOSED CROSS SECTION S.N. 074-0037 (EB) & S.N. 074-0038 (WB)

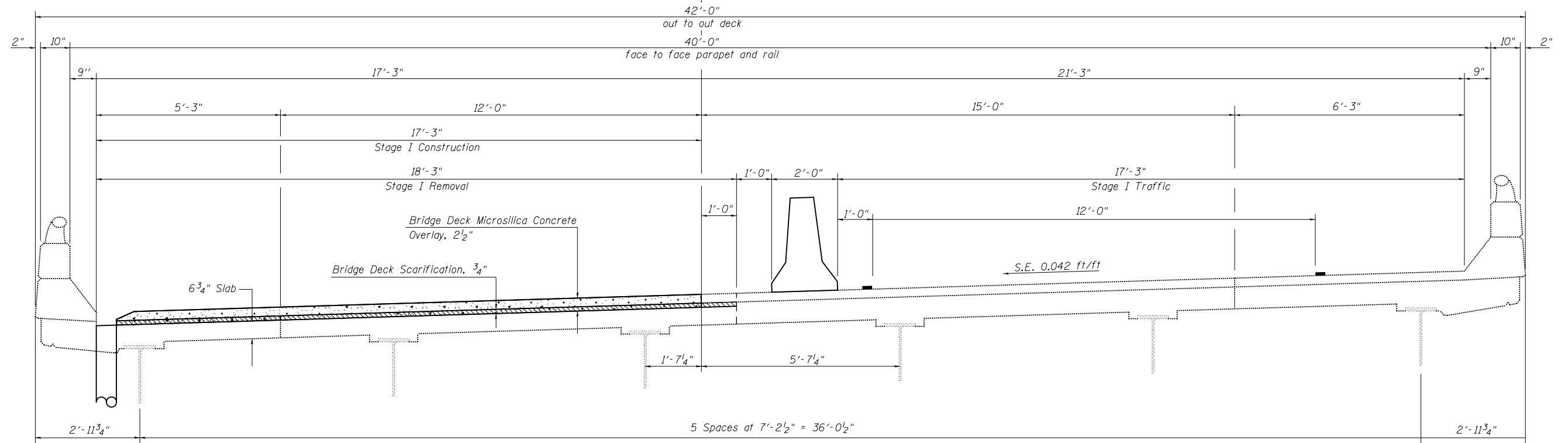


FILE NAME =	USER NAME = eaglinge	DESIGNED - RTC	REVISED - ESS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL DECK CROSS SECTIONS S.N. 074-0037 (EB) & S.N. 074-0038 (WB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	717 Structure Repair Plans.sht.dgn	DRAWN - RTC	REVISED - ESS			74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	101	
	PLOT SCALE = 40.0000' / in.	CHECKED - TJB	REVISED -			CONTRACT NO. 70717					
	PLOT DATE = 10/16/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE:	SHEET 3 OF 23 SHEETS		STA.	TO STA.		

STAGE I CONSTRUCTION DETAILS

S.N. 074-0037 (EB)

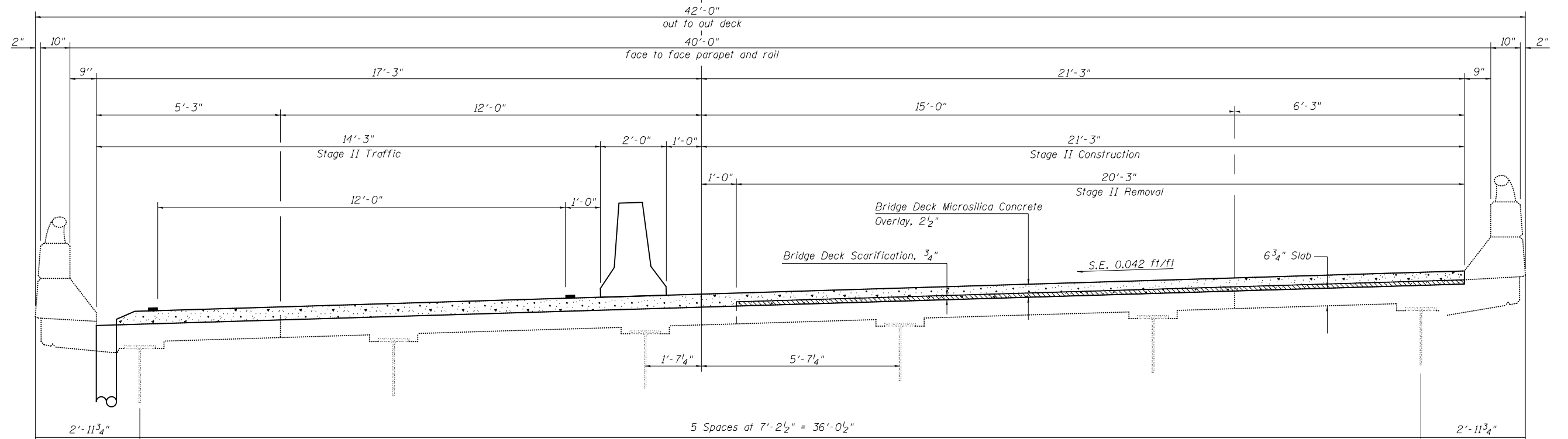
Looking East (Direction of Traffic)



STAGE II DETAILS

S.N. 074-0037 (EB)

Looking East (Direction of Traffic)



FILE NAME =	USER NAME = eaglinge	DESIGNED - RTC	REVISED - ESS
c:\pwwork\pwwork\eam\inga\d0200193\0576717 Structure Repair Plans.sht.dgn		DRAWN - RTC	REVISED - ESS
	PLOT SCALE = 40.0000' / in.	CHECKED - TJB	REVISED -
	PLOT DATE = 10/16/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAIL
S.N. 074-0037 (EB) & S.N. 074-0038 (WB)**

SCALE: SHEET 4 OF 23 SHEETS STA. TO STA.

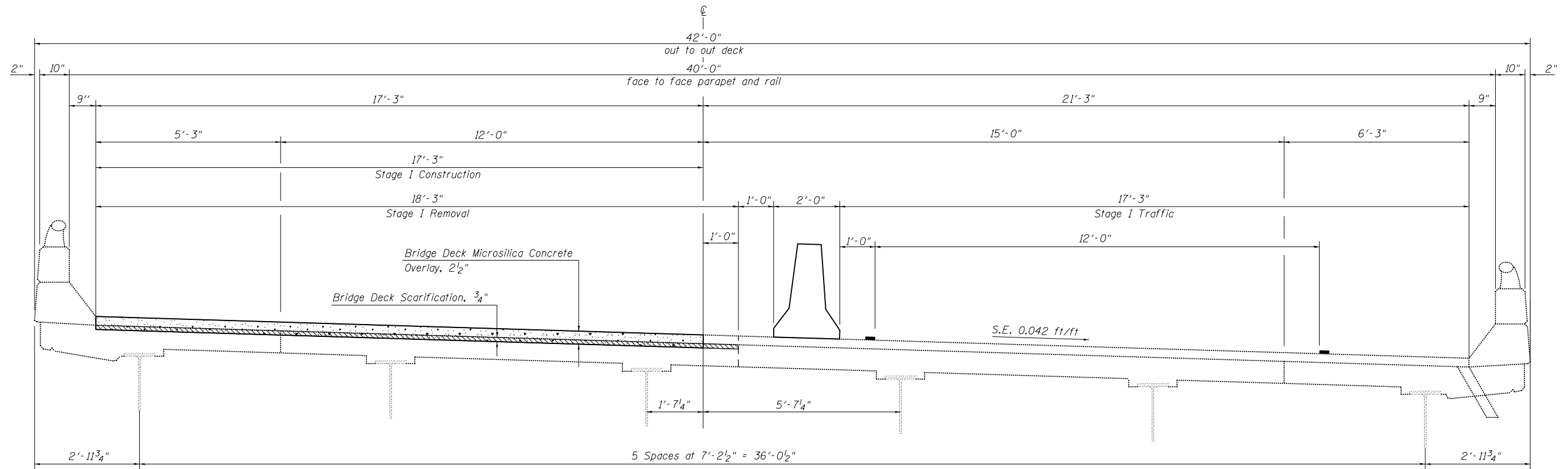
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	102
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				

STAGE I CONSTRUCTION DETAILS

S.N. 074-0038 (WB)

Looking West (Direction of Traffic)

* The H.M.A. Surface for Structure 074-0038 has been found to contain ASBESTOS

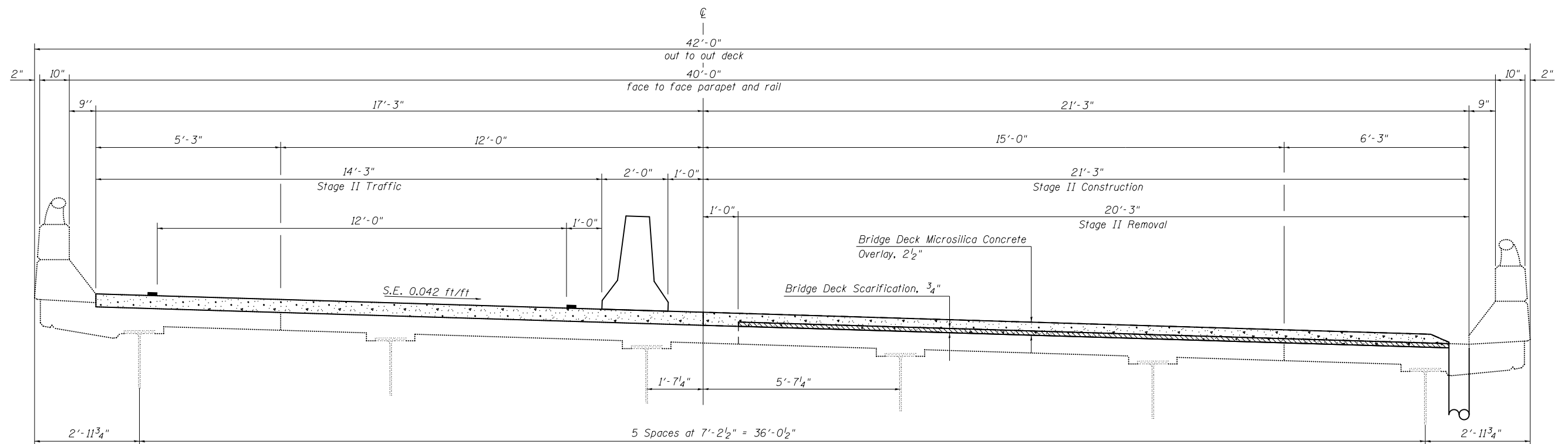


STAGE II CONSTRUCTION DETAILS

S.N. 074-0038 (WB)

Looking West (Direction of Traffic)

* The H.M.A. Surface for Structure 074-0038 has been found to contain ASBESTOS



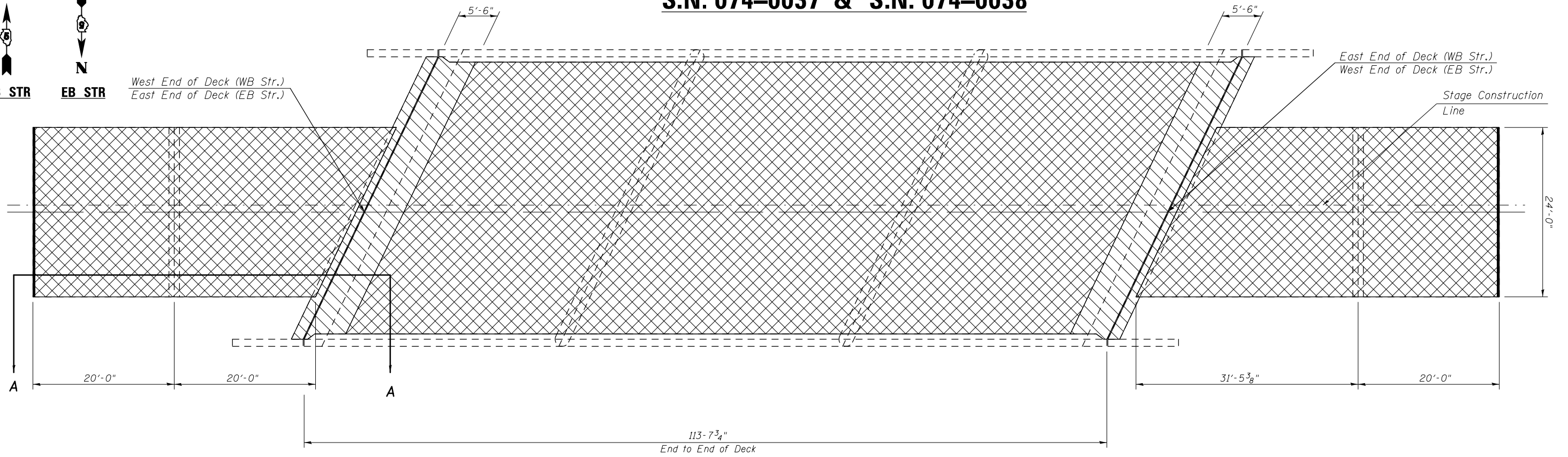
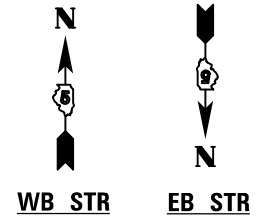
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PLOT SCALE = 40.0000' / in.		CHECKED - TJB	REVISED -
PLOT DATE = 10/16/2014		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

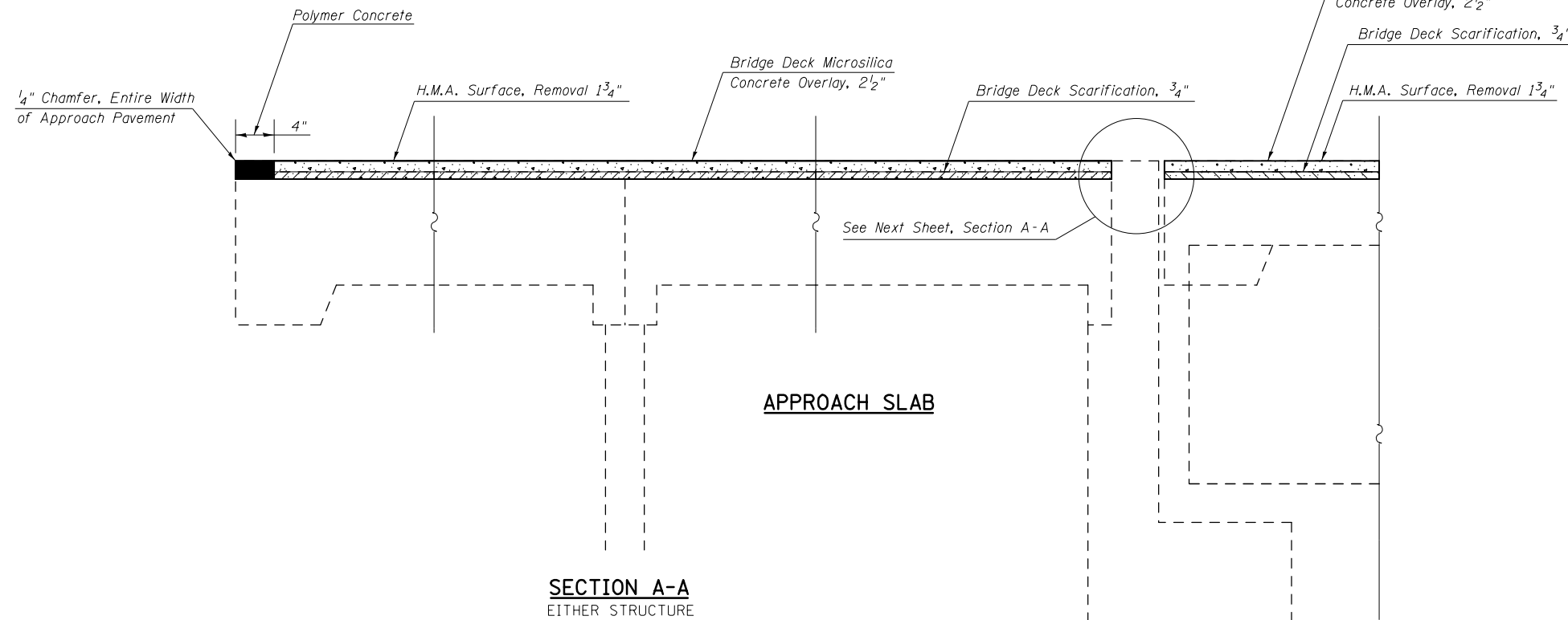
STAGE CONSTRUCTION DETAIL	
S.N. 074-0037 (EB) & S.N. 074-0038 (WB)	
SCALE:	SHEET 5 OF 23 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	103
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				

WEARING SURFACE PLAN S.N. 074-0037 & S.N. 074-0038



PLAN VIEW
EITHER STRUCTURE



SECTION A-A
EITHER STRUCTURE

- H.M.A. Surface Removal (Deck) & Bridge Deck Microsilica Concrete Overlay
- H.M.A. Surface Removal (Deck) & Concrete Superstructure

BILL OF MATERIALS

ITEM	UNIT	TOTAL
H.M.A. SURFACE REMOVAL (DECK)	SQ YD	730.0
H.M.A. SURFACE REMOVAL (ASBESTOS) *	SQ YD	730.0
BRIDGE DECK GROOVING	SQ YD	1414.0
BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2 1/2"	SQ YD	1362.0
BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1365.0
POLYMER CONCRETE	SQ FT	32.0

* The H.M.A. Surface for Structure 074-0038 has been found to contain ASBESTOS

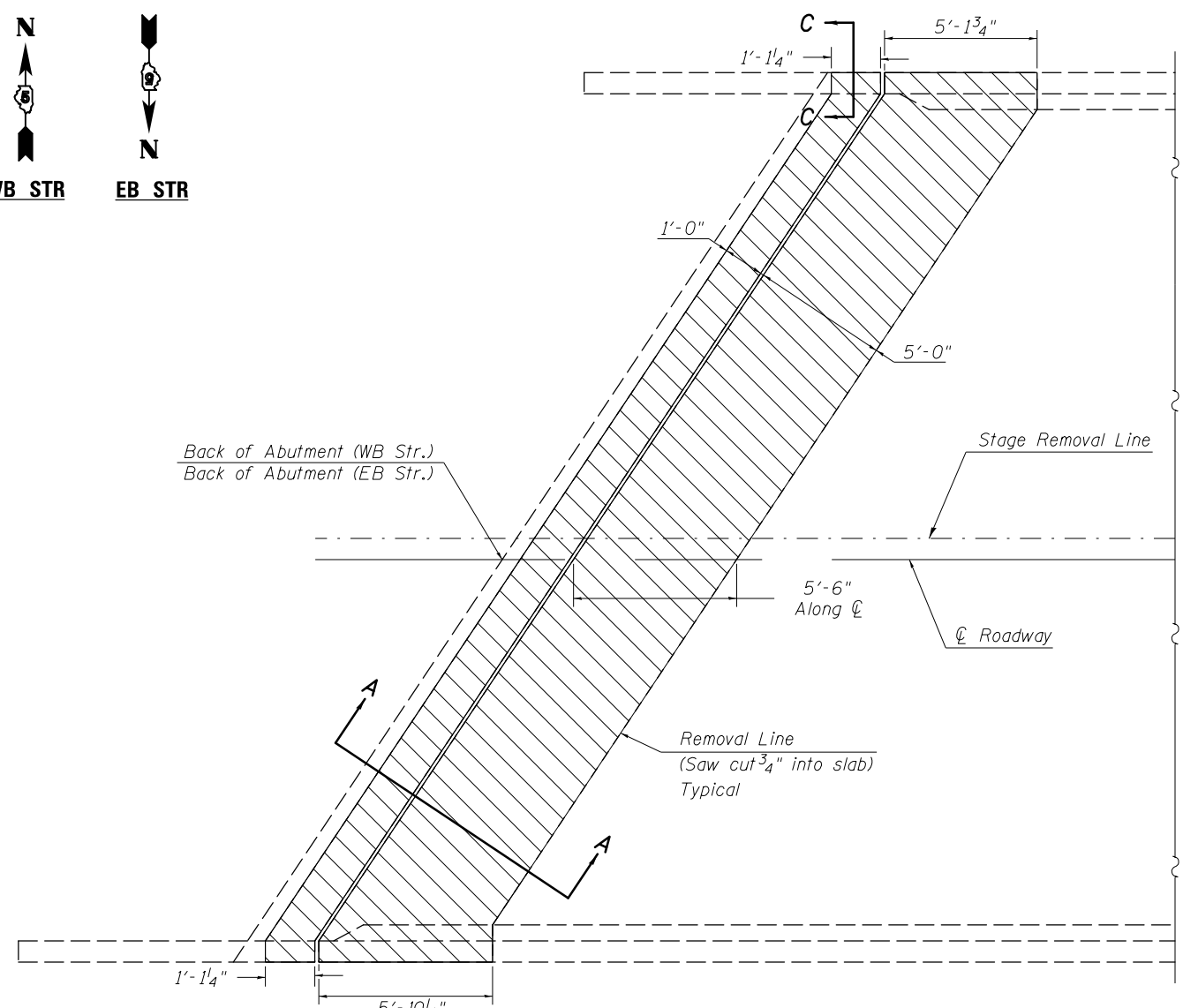
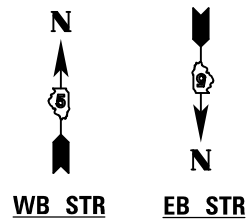
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PLOT DATE = 10/16/2014		DATE - 1-25-2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

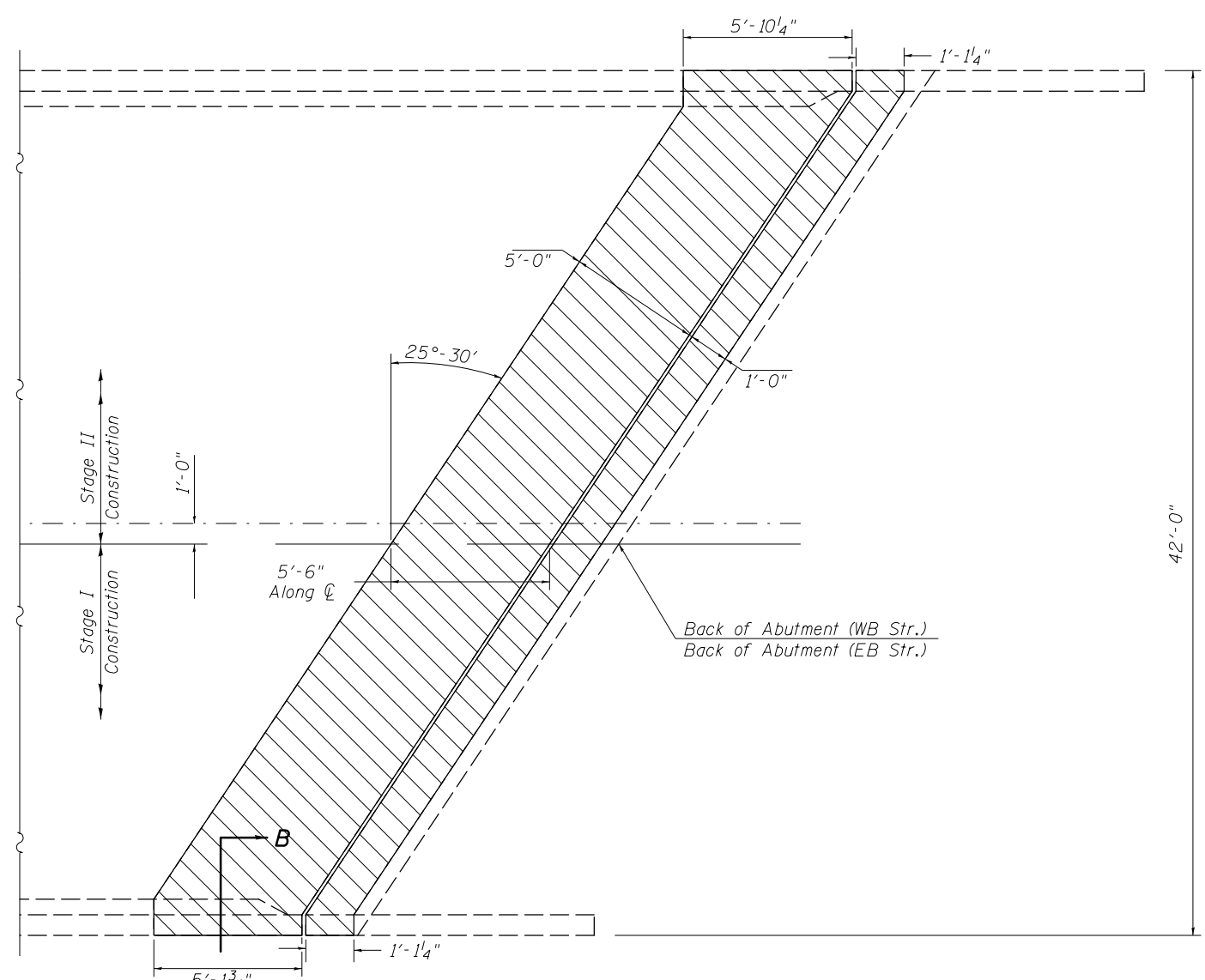
**WEARING SURFACE DETAILS
S.N. 074-0037 (EB) & S.N. 074-0038 (WB)**

SCALE: SHEET 6 OF 23 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	104
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				



ABUTMENT
EITHER STRUCTURE



ABUTMENT
EITHER STRUCTURE

NOTES:

Existing Reinforcement Bars Extending into the Removal area shall be Cleaned, Straightened and Incorporated into the new Construction. Any Reinforcement Bars that are Damaged during Concrete Removal shall be Replaced with an Approved Bar Splicer or Anchorage System. Cost included with Concrete Removal.

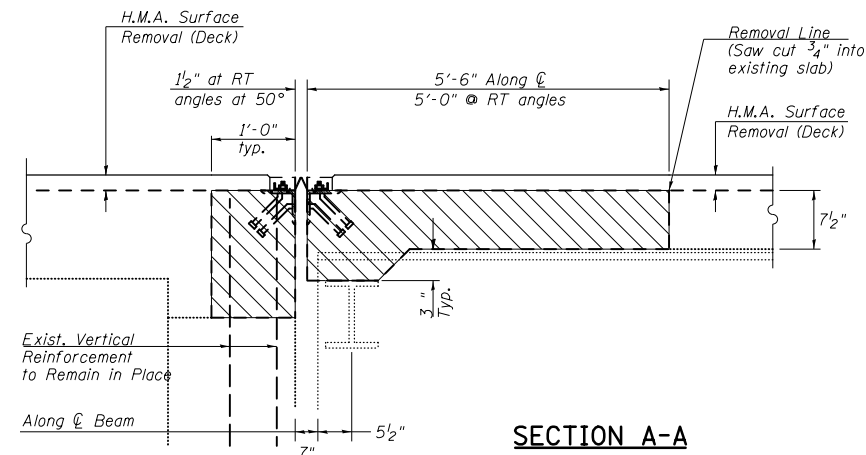
The existing expansion joint system shall be removed completely, as well as any foreign material that has accumulated or been placed in the joint openings. The cost for this work is included in Concrete Removal and no additional compensation will be allowed.

The handrail attached to the top of the parapets shall be unbolted to allow for the removal and placement of the parapet ends. Following completion of the parapet ends, the handrail shall be re-attached. The cost of this work shall be included in Concrete Removal & Concrete Superstructures.

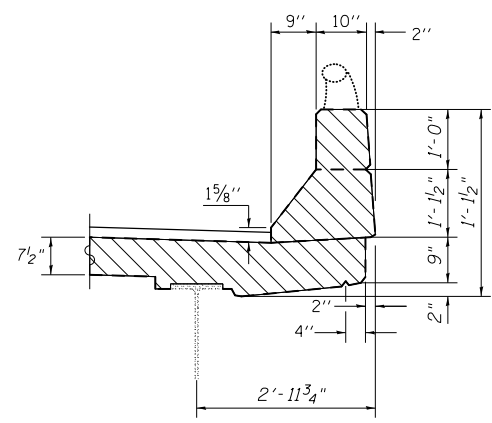
All existing deck tie downs shall be removed. Cost included with Concrete Removal.

BILL OF MATERIALS

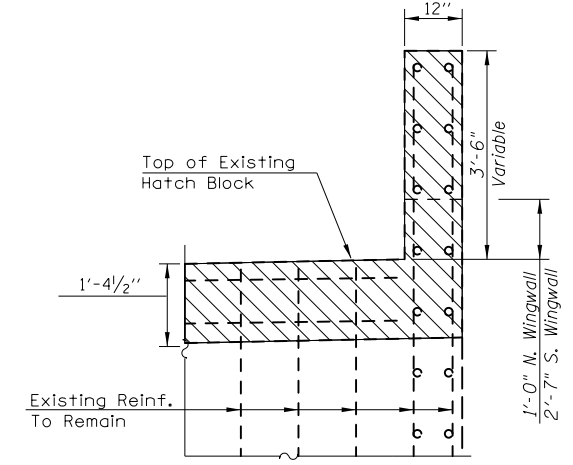
ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	38.3



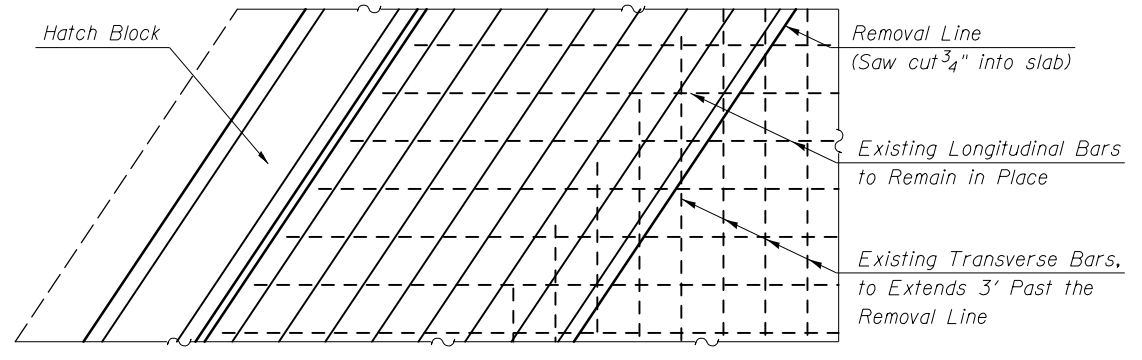
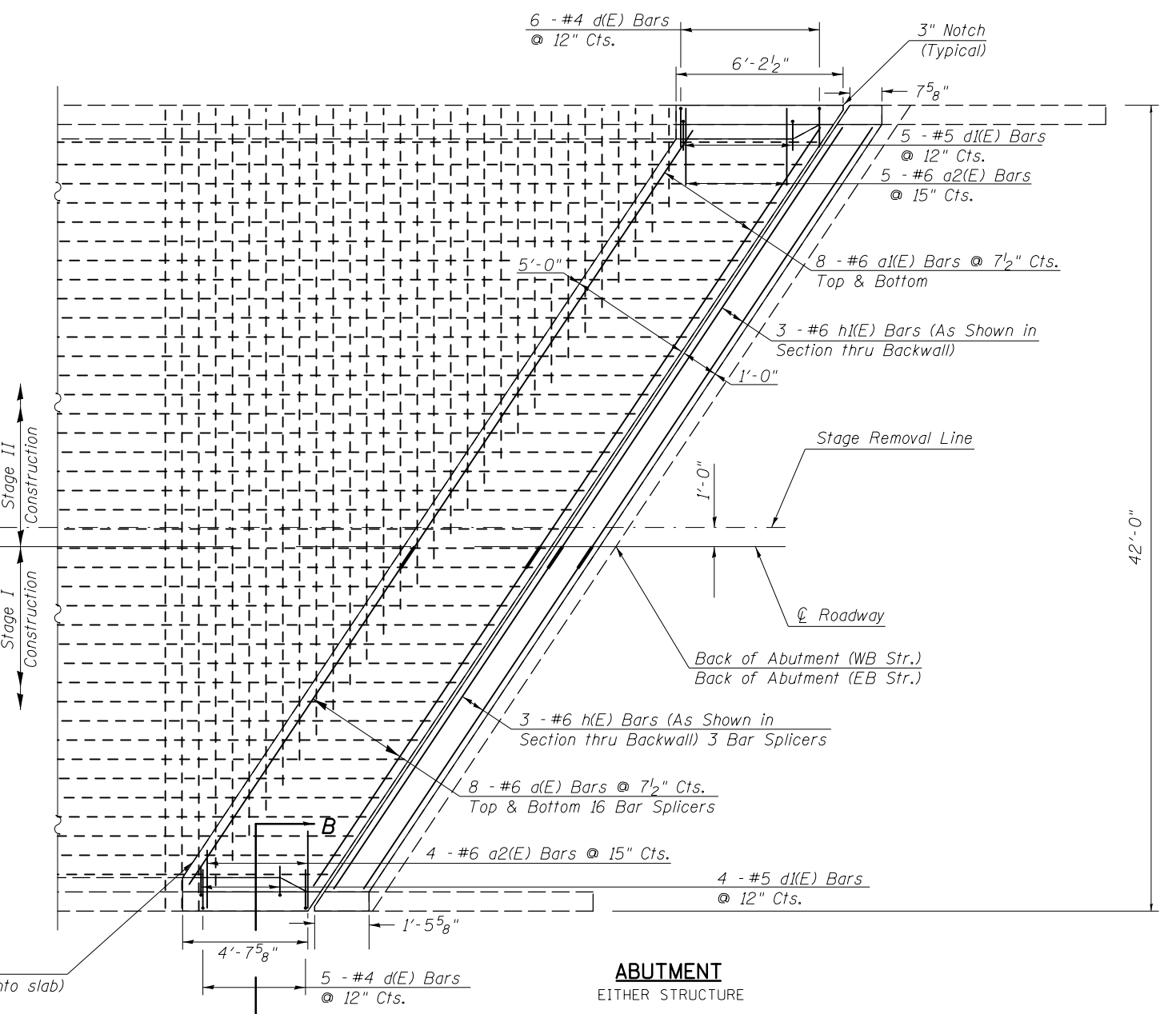
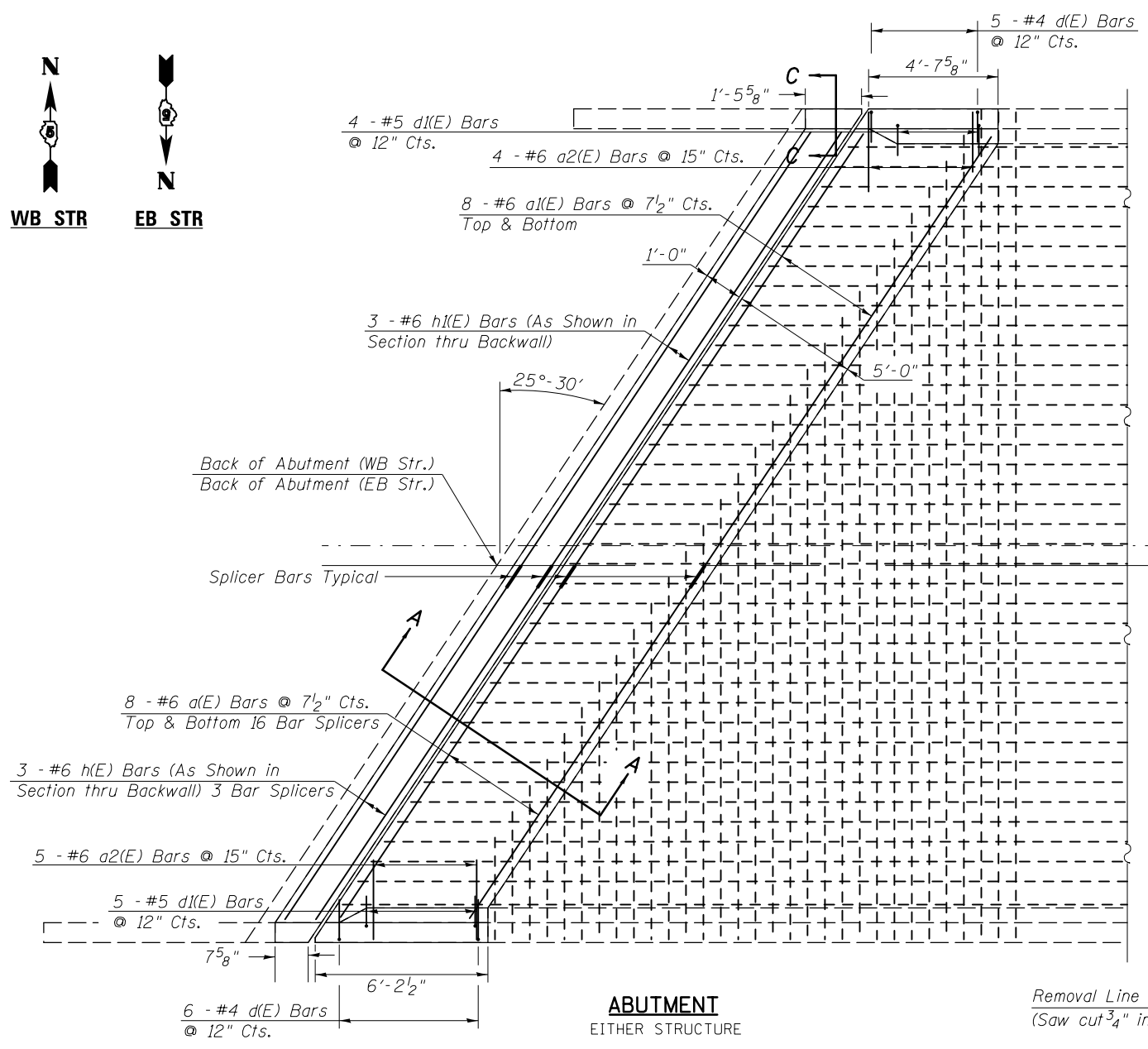
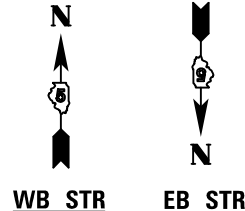
SECTION A-A
Showing Concrete Removal Limits at Abutments and Deck Ends



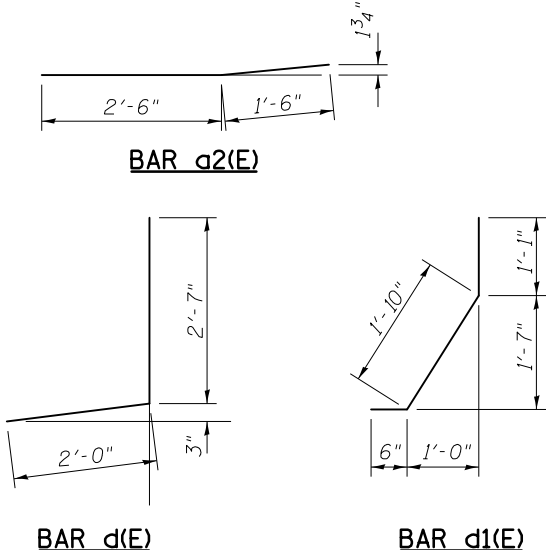
SECTION B-B
Showing Concrete Removal Limits at Parapets and Deck Ends



SECTION C-C
Showing Concrete Removal Limits at Hatch Blocks and Wings



REINFORCEMENT BAR DETAIL



BILL OF MATERIALS

BAR NO.	SIZE	LENGTH	SHAPE
a(E)	#6	19'-10"	—
a1(E)	#6	24'-6"	—
a2(E)	#6	4'-0"	—
d(E)	#4	4'-7"	J
d1(E)	#5	3'-5"	J
h(E)	#6	19'-8"	—
h1(E)	#6	24'-4"	—
REINFORCEMENT BARS (EPOXY COATED)		POUND	5520.0
CONCRETE SUPERSTRUCTURE		CU YD	37.2
BAR SPlicERS		EACH	76.0
PROTECTIVE COAT		SQ YD	133.3

SEE SECTION DETAILS NEXT SHEET.

NOTES

All existing deck transverse reinforcement (a, a1, a2) bars to be cut off 3' inside the removal line.

Existing Reinforcement Bars Extending into the Removal area Shall be Cleaned, Straightened and Incorporated into the new Construction. Any Reinforcement Bars that are Damaged during Concrete Removal shall be Replaced with an Approved Bar Splicer or Anchorage System. Cost included with Concrete Removal.

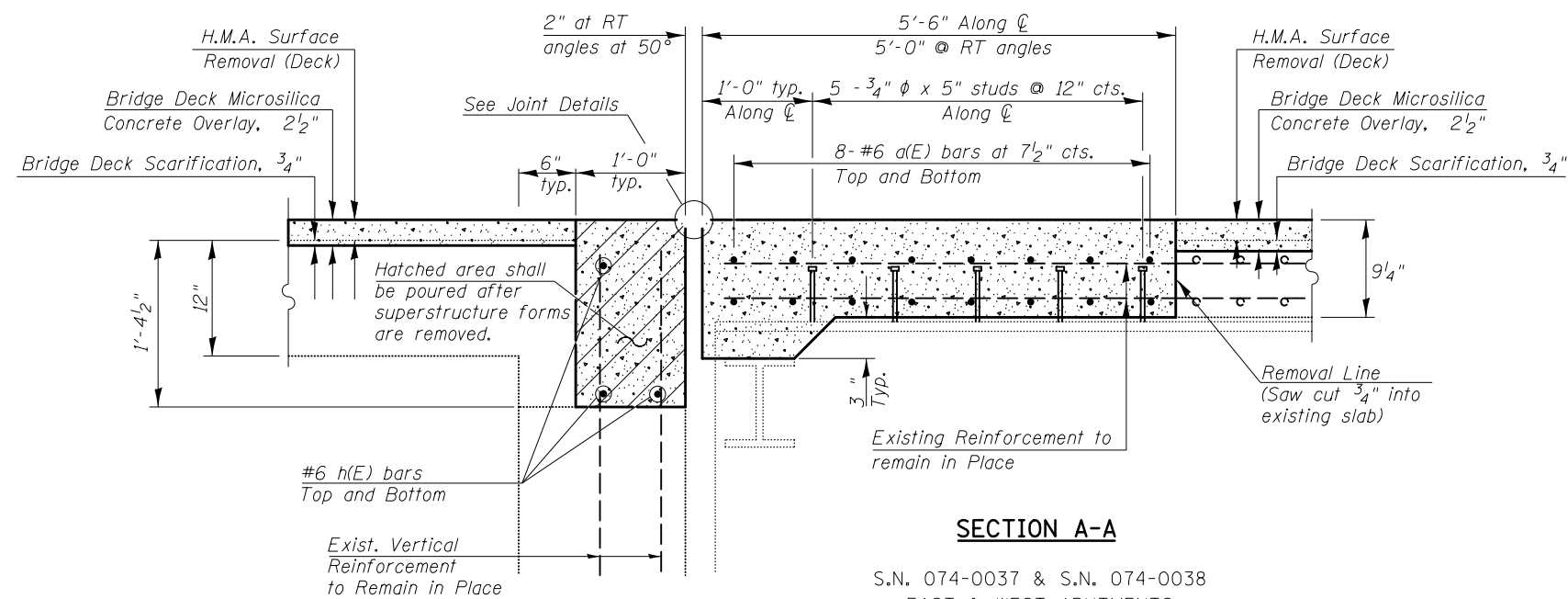
Reinforcement Bars Designated (E) shall be Epoxy Coated.

FILE NAME =	USER NAME = eaglinge	DESIGNED - ESS	REVISED - ESS
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	PLOT DATE = 10/16/2014	DATE - 1-30-2013	REVISED - 6-6-2013

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

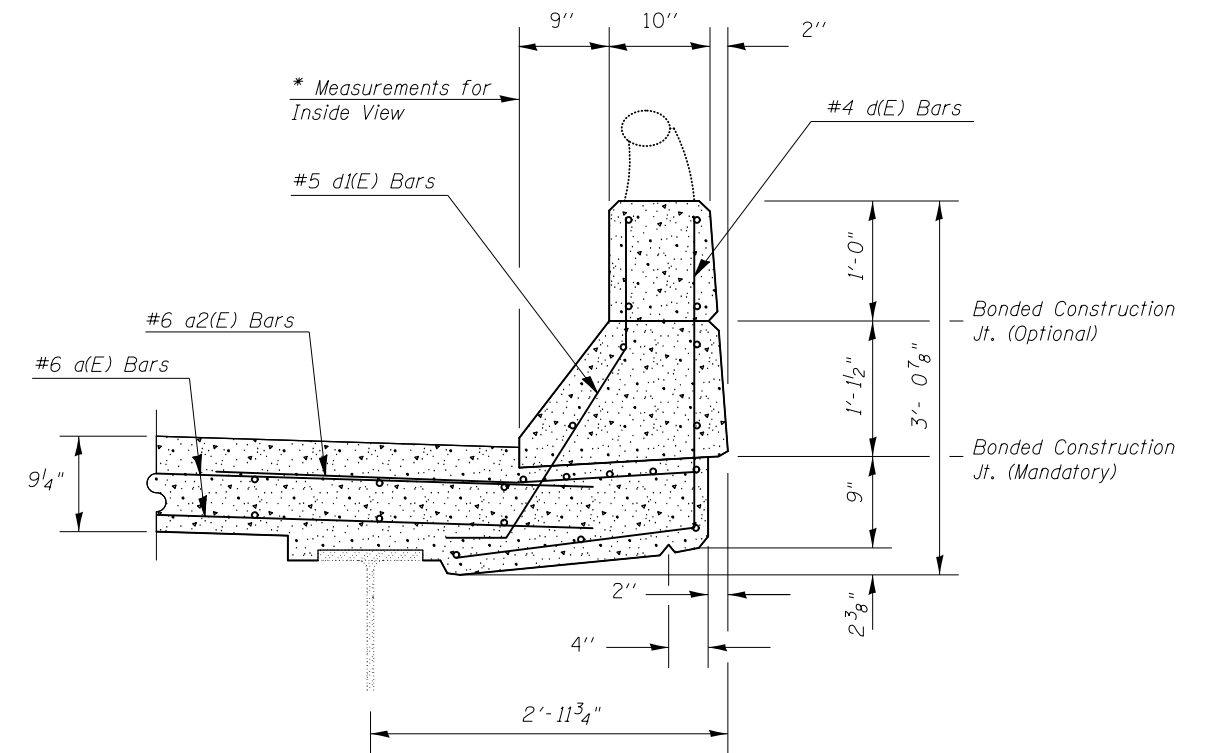
SUPERSTRUCTURE REPAIR PLAN
S.N. 074-0037 (EB) & S.N. 074-0038 (WB)
 SCALE: SHEET 8 OF 23 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	106
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				



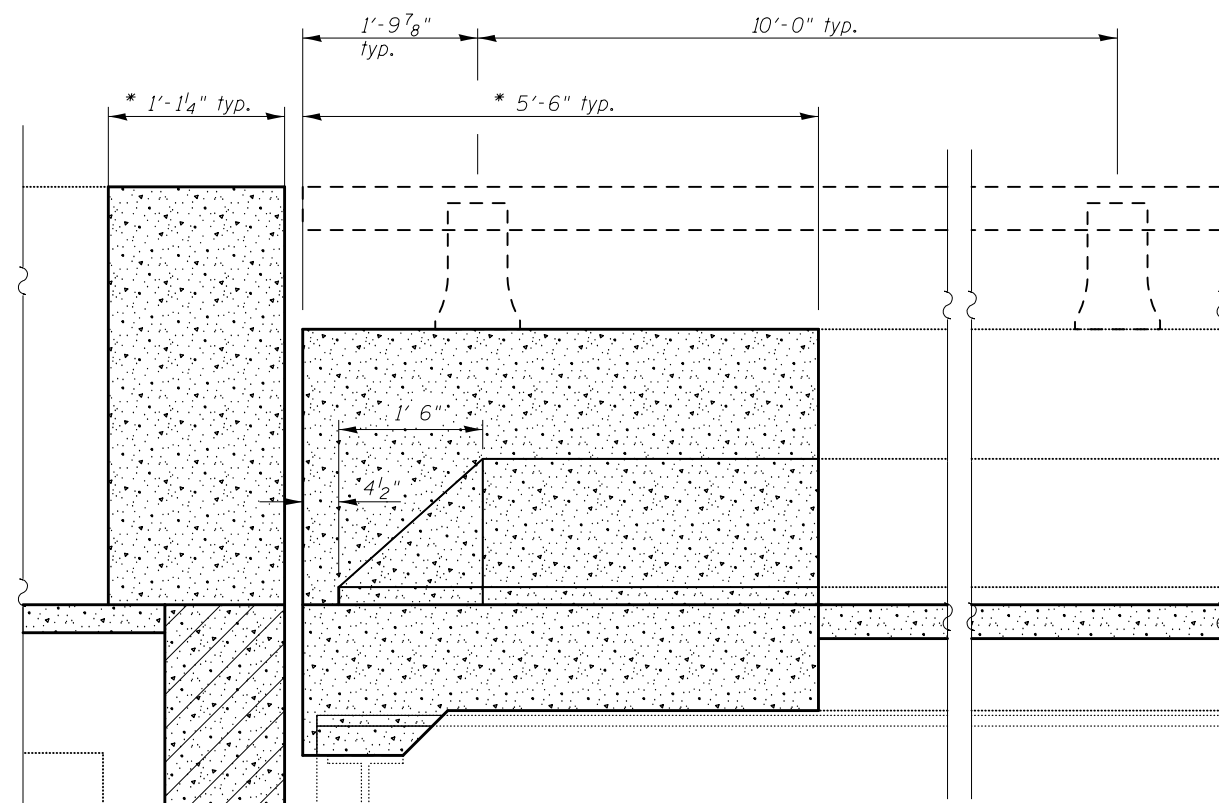
SECTION A-A

S.N. 074-0037 & S.N. 074-0038
 EAST & WEST ABUTMENTS
 The H.M.A. Surface for Structure 074-0038
 has been found to contain ASBESTOS



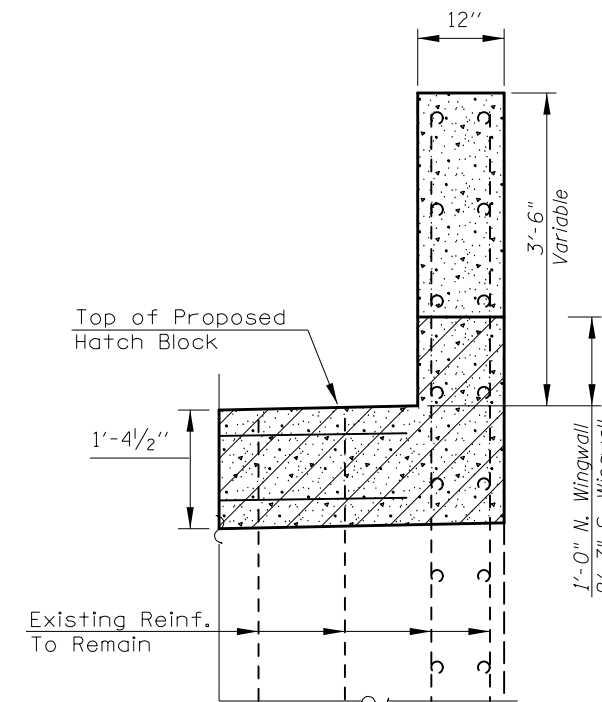
SECTION B-B

S.N. 074-0037 & S.N. 074-0038
 PARAPET & DECK ENDS



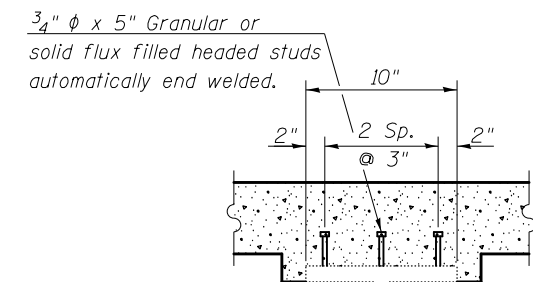
INSIDE VIEW AT ABUTMENT

S.N. 074-0037 & S.N. 074-0038
 EAST & WEST ABUTMENTS



SECTION C-C

Showing Concrete Removal Limits
 at Hatch Blocks and Wings



SECTION AT BEAM END

(ALL BEAMS 27WF94)

NOTES:

All existing deck transverse reinforcement (a, a1, a2) bars to be cut off 3' inside the removal line.

Existing deck "Tie Downs" in place at several beam lines on each structure. Also existing deck patching forms in place on S.N. 074-0038. Cost of removal included with concrete removal.

The guardrail attached to the end of the parapets shall be unbolted to allow for the removal and replacement of the parapet ends. The existing anchor bolts are 3'-6" in length with only 4" +/- exposed. Care shall be taken to protect the existing anchor bolts during concrete removal so that they may be reused. If the anchor bolts are damaged or determined unusable by the Engineer, they shall be replaced at the contractor's expense. Following completion of the parapet ends, the guardrail shall be re-attached. The cost of this work shall be included in Concrete Removal & Concrete Superstructures.

Existing Longitudinal Reinforcement in the deck and parapets and vertical reinforcement in the hatch blocks shall be reused.

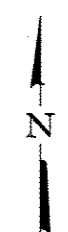
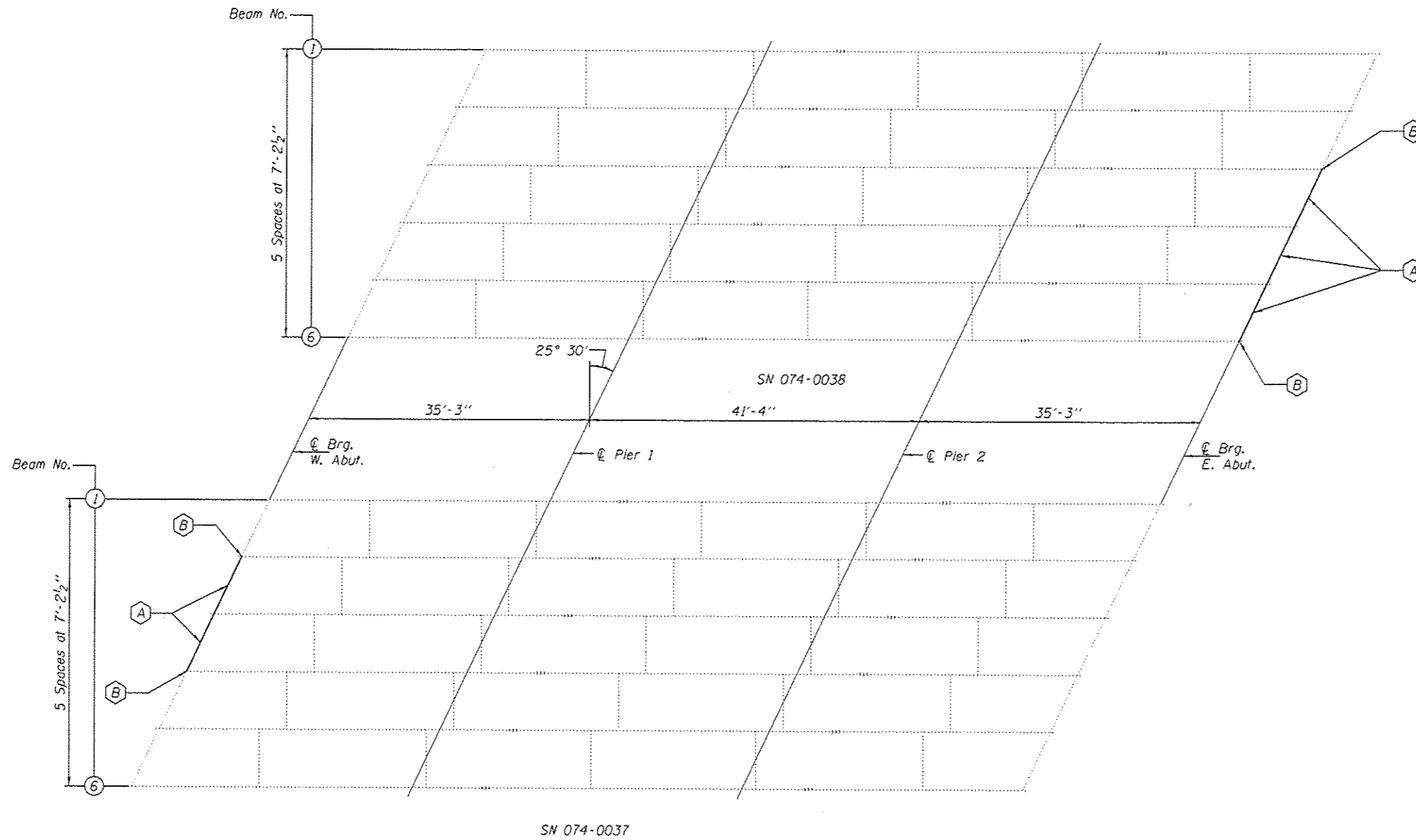
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		CHECKED - TJB	REVISED -
		DATE - 1-31-2013	REVISED - 6-10-2013

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE REPAIR DETAILS
 S.N. 074-0037 (EB) & S.N. 074-0038 (WB)**

SCALE: SHEET 9 OF 23 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	107
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				



DIAPHRAGM REPLACEMENT LOCATION SKETCH

- ⊙ A - Replace diaphragm and clip angle
- ⊙ B - Replace clip angle only

DESIGNED SMR
 CHECKED DAB
 DRAWN baliva
 CHECKED SMR DAB

EXAMINED *Timothy A. Daulton* DATE DECEMBER 3, 2014
 ACTING ENGINEER OF STRUCTURAL SERVICES
 PASSED *A. Carl Meyer*
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

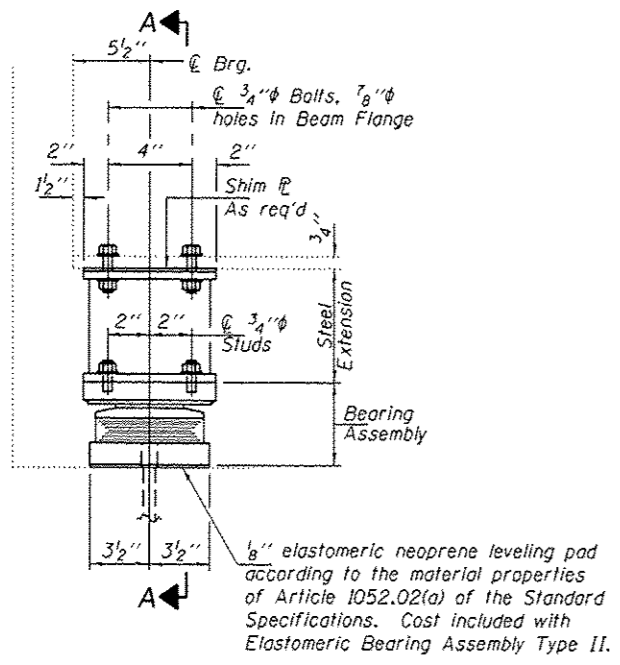
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DIAPHRAGM REPLACEMENT LOCATION SKETCH
 SN 074-0037 & 0038

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	174-21RS-2 & 174-31RS-3	PIATT	310	108
				CONTRACT NO. 70717

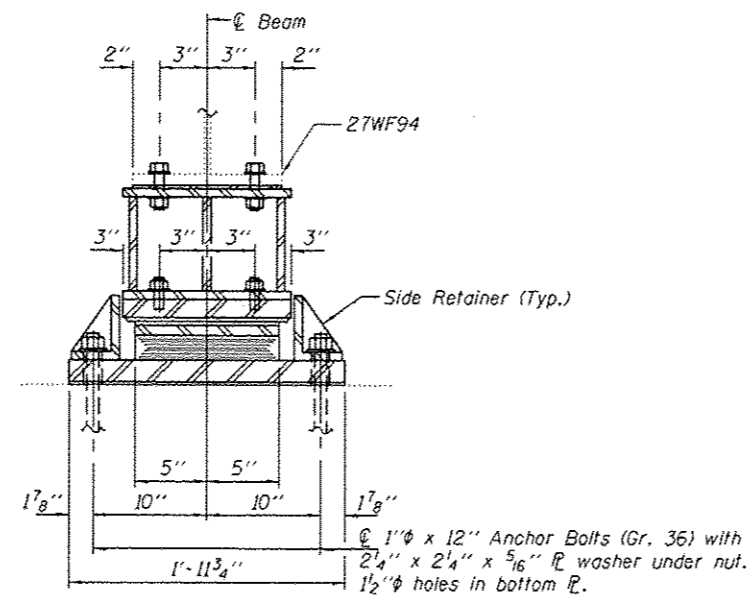
SHEET NO. 10 OF 23 SHEETS

ILLINOIS FED. AID PROJECT



ELEVATION AT ABUTMENT

TYPE II TFE ELASTOMERIC EXP. BRG.

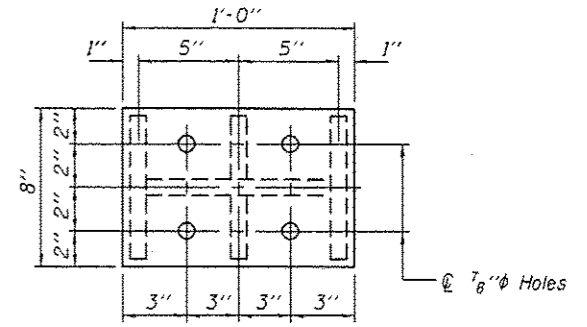


SECTION A-A

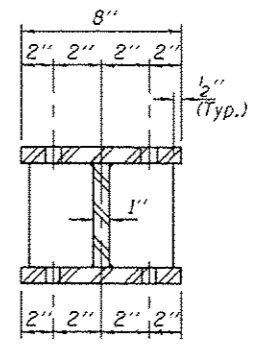
BEAM REACTIONS

RP (K)	14.5
Rt (K)	32.5
Imp. (K)	9.8
R (Total) (K)	56.8

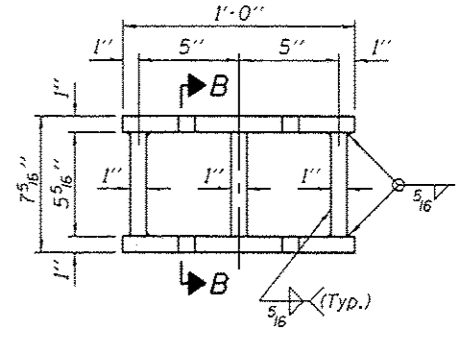
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 30 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
 Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



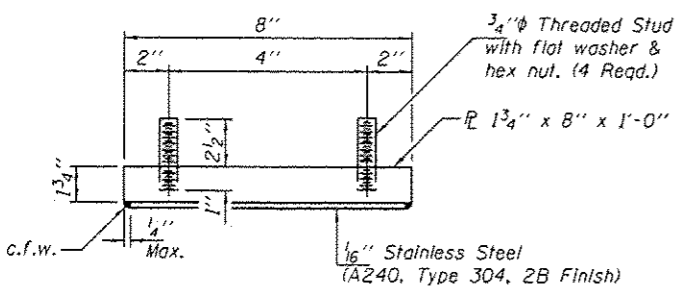
PLAN TOP AND BOTTOM PLATE



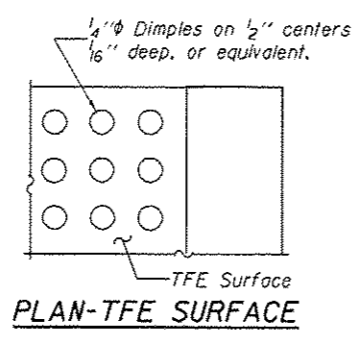
SECTION B-B



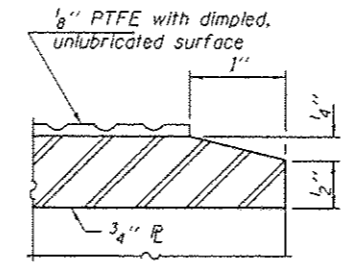
STEEL EXTENSION DETAIL



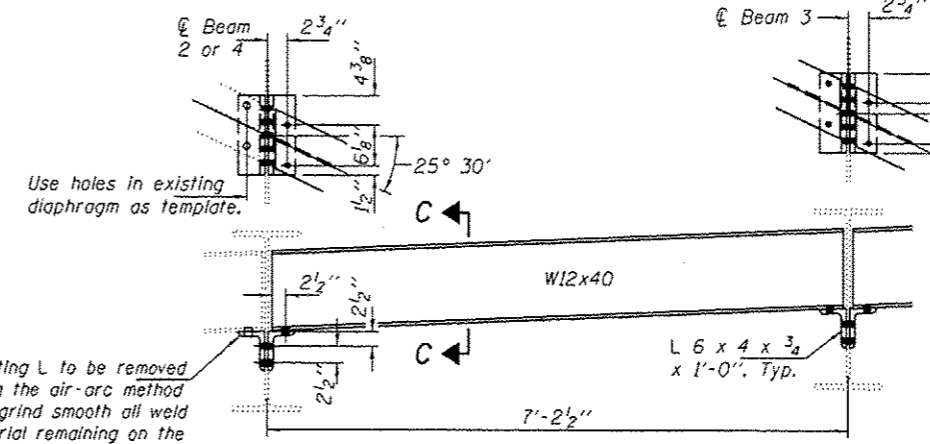
TOP BEARING ASSEMBLY (Looking North)



PLAN-TFE SURFACE

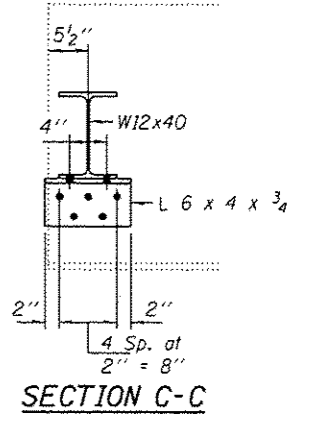


SECTION THRU TFE

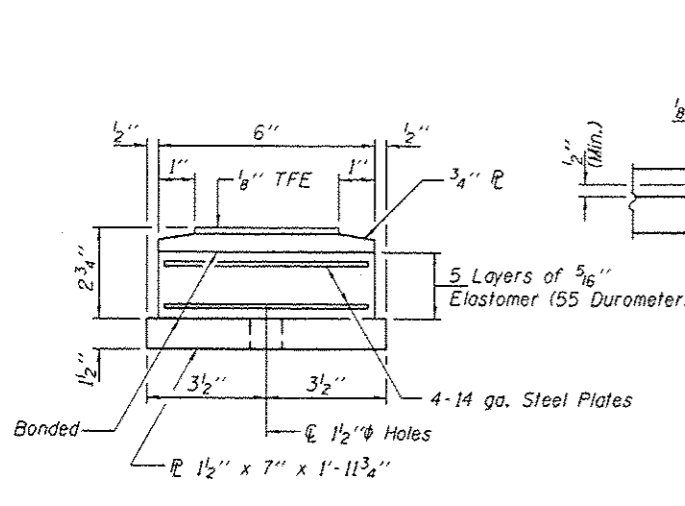


DIAPHRAGM REPLACEMENT DETAIL

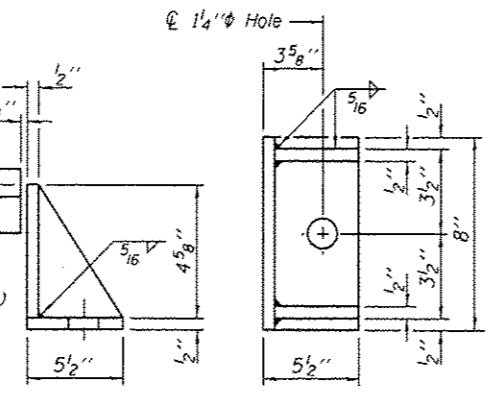
(2 Required. See Location Sketch on sheet of)
 Fasteners shall be high strength bolts. Bolts 3/4"φ, open holes 13/16"φ, unless otherwise noted.



SECTION C-C

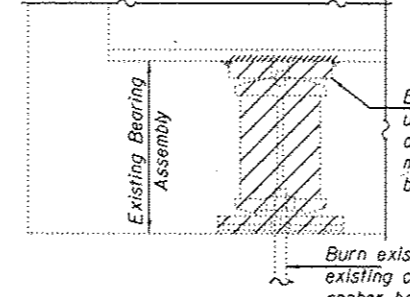


BOTTOM BEARING ASSEMBLY



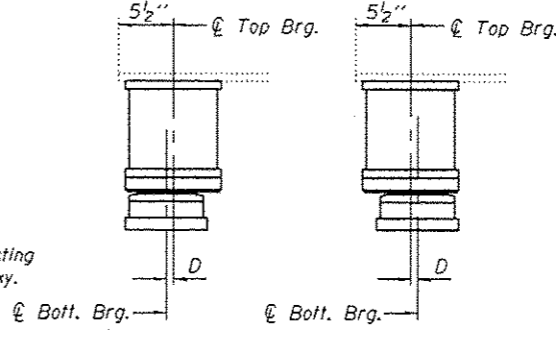
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



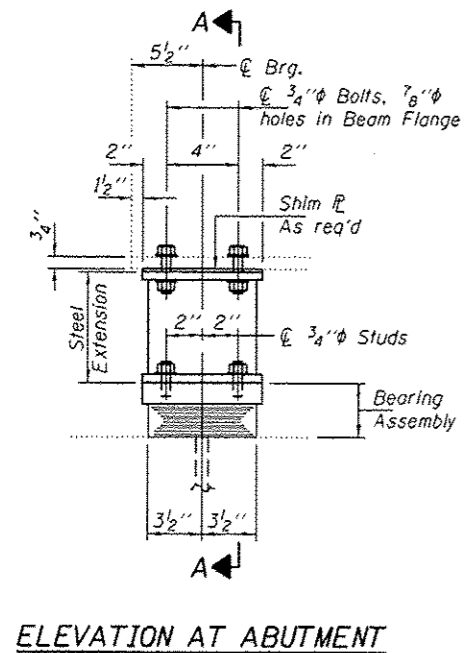
BELOW 50° F. (Move bot. brg. away from fixed brg.)
 ABOVE 50° F. (Move bot. brg. toward fixed brg.)
 SETTING ANCHOR BOLTS AT EXP. BRG.
 D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL (SN 074-0037)

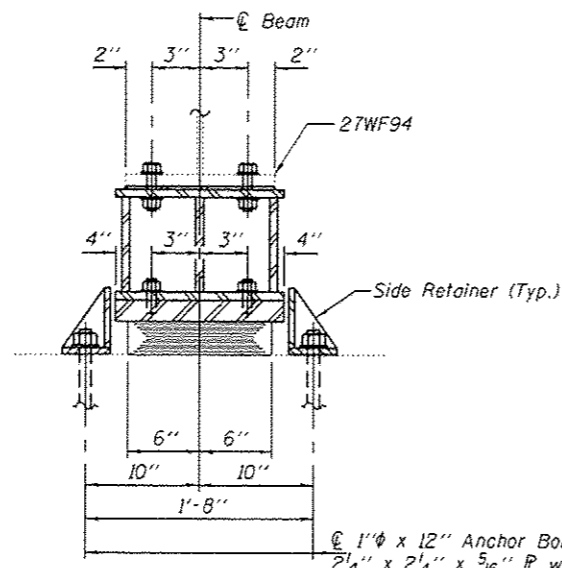
Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	600
Structural Steel Removal	Pound	730
Anchor Bolts 1"φ	Each	12

BILL OF MATERIAL (SN 074-0038)

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	1320
Anchor Bolts 1"φ	Each	12



ELEVATION AT ABUTMENT



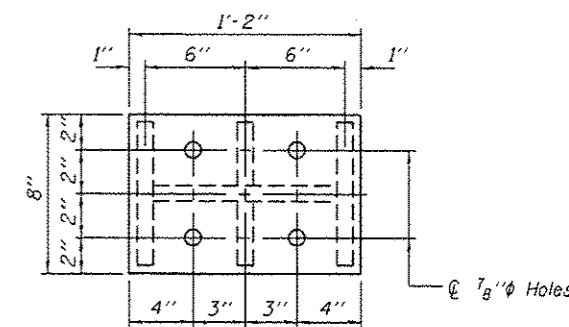
SECTION A-A

1" x 12" Anchor Bolts (Gr. 36) with 2 1/4" x 2 1/4" x 5/16" P washer under nut.

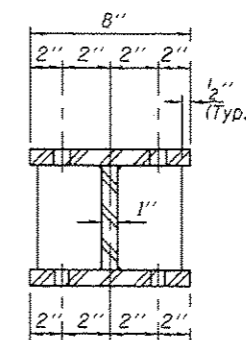
BEAM REACTIONS

RR	(K)	18.5
R _L	(K)	32.0
Imp.	(K)	9.3
R (Total)	(K)	59.8

Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 30 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



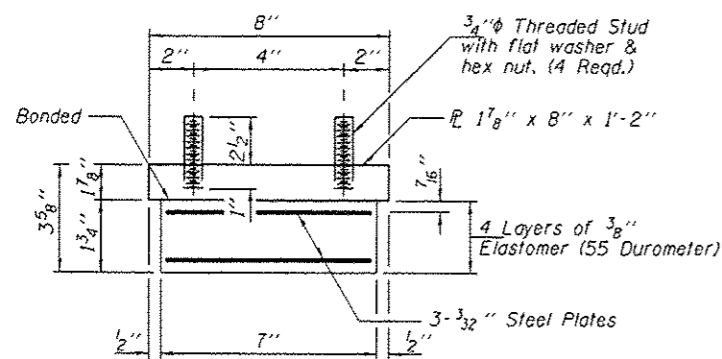
PLAN TOP AND BOTTOM PLATE



SECTION B-B

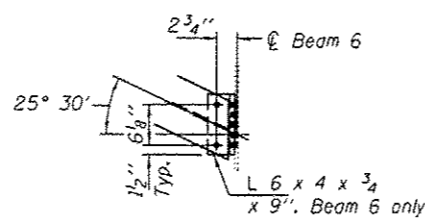
STEEL EXTENSION DETAIL

TYPE I ELASTOMERIC EXP. BRG.



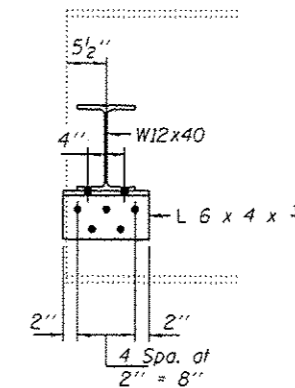
BEARING ASSEMBLY

Note:
 Shim plates shall not be placed under Bearing Assembly.



EXISTING BEARING REMOVAL DETAIL

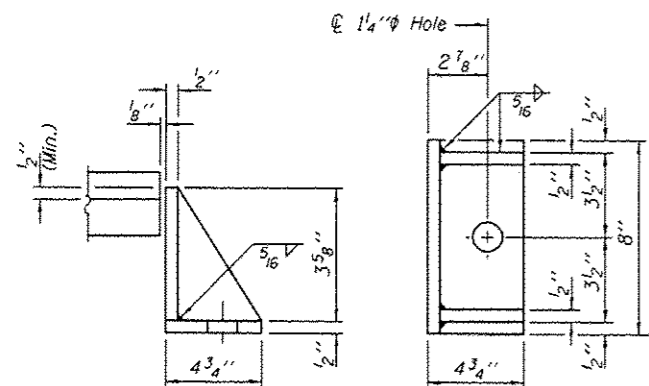
Cost Included with Jack and Remove Existing Bearings.



SECTION C-C (Beams 3, 4 & 5)

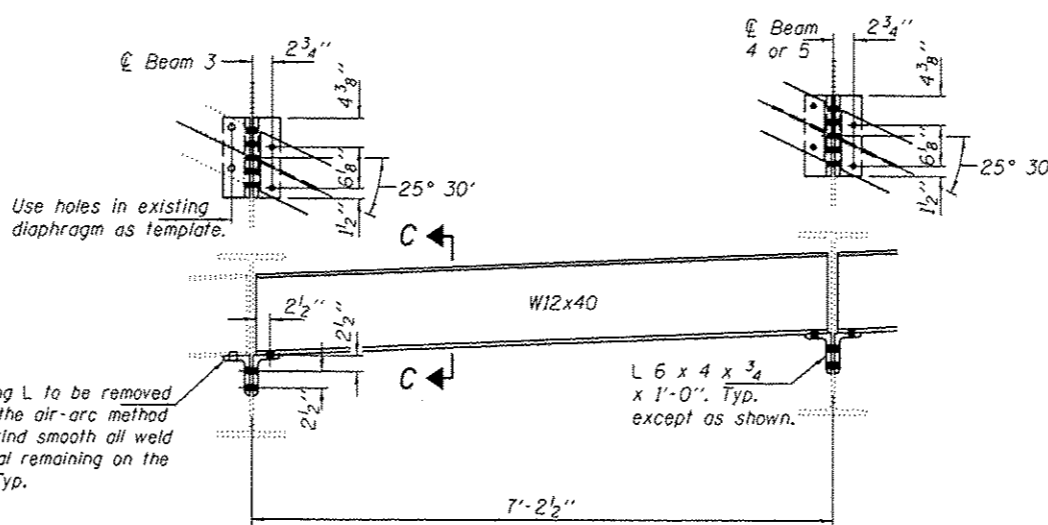
BILL OF MATERIAL (SN 074-0037)

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	650
Anchor Bolts 1"φ	Each	12



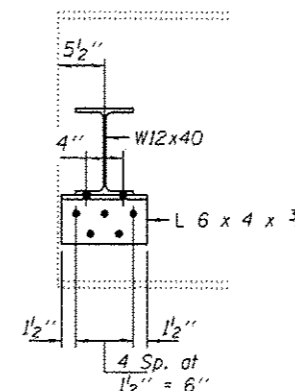
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



DIAPHRAGM REPLACEMENT DETAIL

(3 Required. See Location Sketch on sheet of)
 Fasteners shall be high strength bolts. Bolts 3/4"φ, open holes 1 1/8"φ, unless otherwise noted.



SECTION C-C (Beam 6)

BILL OF MATERIAL (SN 074-0038)

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	1700
Structural Steel Removal	Pound	1070
Anchor Bolts 1"φ	Each	12

TYI/REPS 12-03-2008

DESIGNED SMR
 CHECKED DAB
 DRAWN baliva
 CHECKED SMR DAB

EXAMINED
 PASSED
 ACTING ENGINEER OF STRUCTURAL SERVICES
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

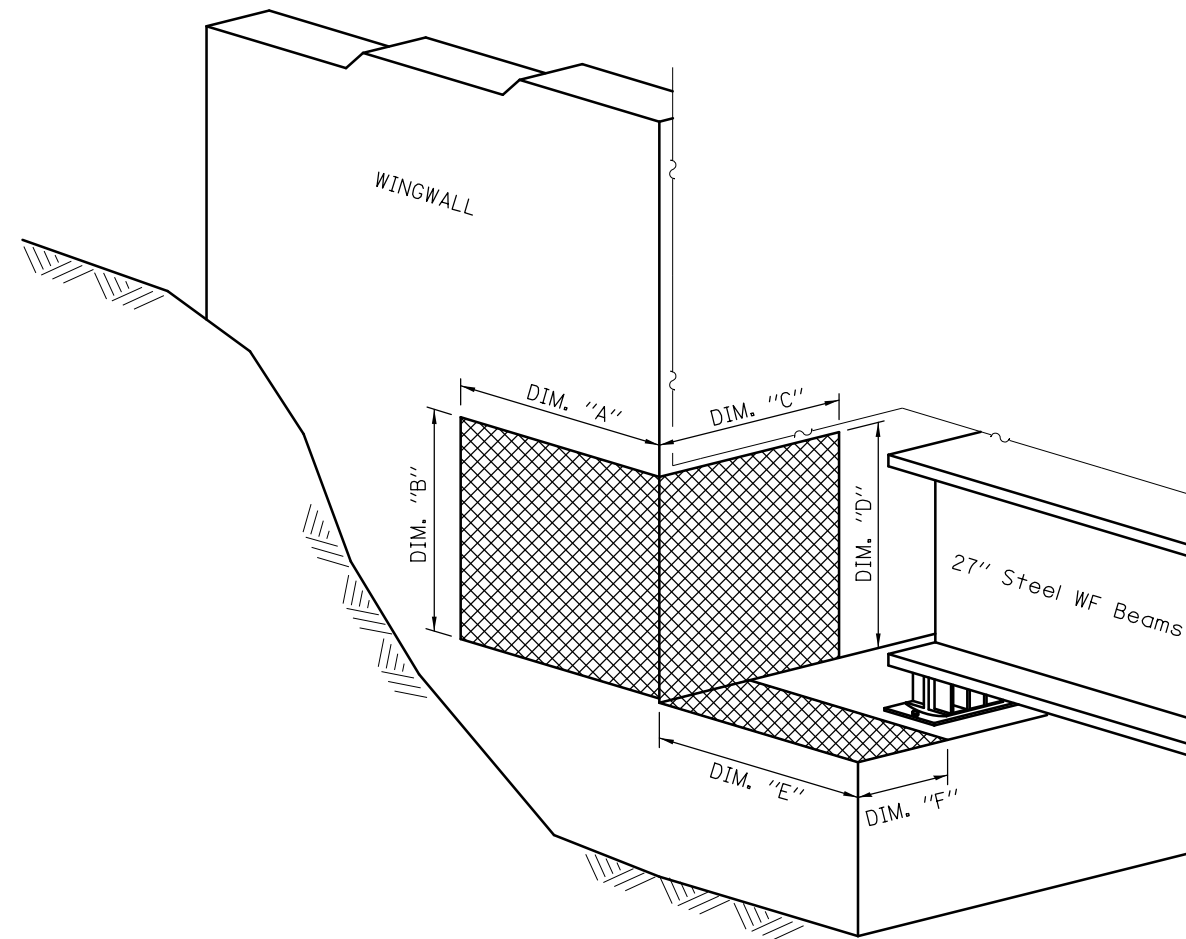
DATE - DECEMBER 3, 2014

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT BEARING REPLACEMENT DETAILS
 SN 074-0037 & 0038

SHEET NO. 12 OF 23 SHEETS

F.A.I. SECTION COUNTY TOTAL SHEETS SHEET NO.
 74 (T4-21RS-2 & T4-31RS-3) PIATT 310 110
 CONTRACT NO. 70717
 ILLINOIS FED. AID PROJECT



ISOMETRIC VIEW AT ABUTMENT CORNER

STRUCTURE REPAIR OF CONCRETE, DEPTH EQUAL TO OR LESS THAN 5"								
STRUCTURE	ABUTMENT CORNER	WINGWALL		CORNER		ABUTMENT CAP		AREA (SQ FT)
		A	B	C	D	E	F	
074-0037	NW	1.00	2.50	1.00	2.50			5.0
	SW							
	NE	1.00	3.00	7.67	3.00			26.0
	SE	1.00	3.50	1.00	3.50			7.0
TOTAL =								38.0
074-0038	NW	1.00	4.00	2.00	4.00			12.0
	SW	0.00	3.00	1.00	3.00			3.0
	NE	1.00	3.50	1.00	3.50			7.0
	SE	1.00	3.50	1.00	3.50			7.0
TOTAL =								29.0
GRAND TOTAL =								67.0

LEGEND

Structural Repair of Concrete, Depth Equal to or Less Than 5"

Note:

See Special Provision for Structural Repair of Concrete.

BILL OF MATERIAL

Includes totals from Pier Repair and Substructure Repair Quantities.

STRUCTURE	ITEM	UNIT	TOTAL
074-0037	STRUCTURE REPAIR OF CONCRETE, DEPTH EQUAL TO OF LESS THAN 5"	SQ FT	38.0
074-0038	STRUCTURE REPAIR OF CONCRETE, DEPTH EQUAL TO OF LESS THAN 5"	SQ FT	29.0
	PROTECTIVE COAT	SQ FT	7.5

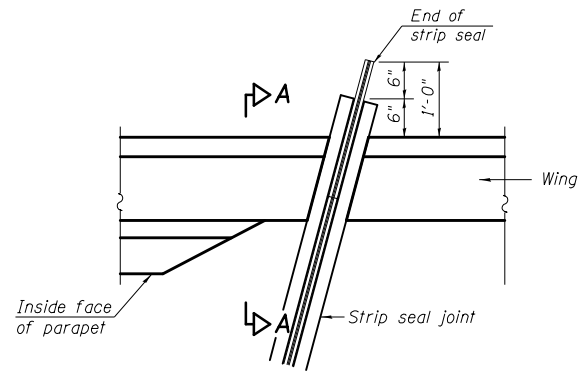
FILE NAME =	USER NAME = eaglinge	DESIGNED - RTC	REVISED - ESS
c:\pwork\pwork\pwork\pwork\d0200193\0570717 Structure Repair Plans.sht.dgn		DRAWN - RTC	REVISED -
PLOT SCALE = 40.0000' / in.		CHECKED - TJB	REVISED -
PLOT DATE = 10/16/2014		DATE - 3-27-2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

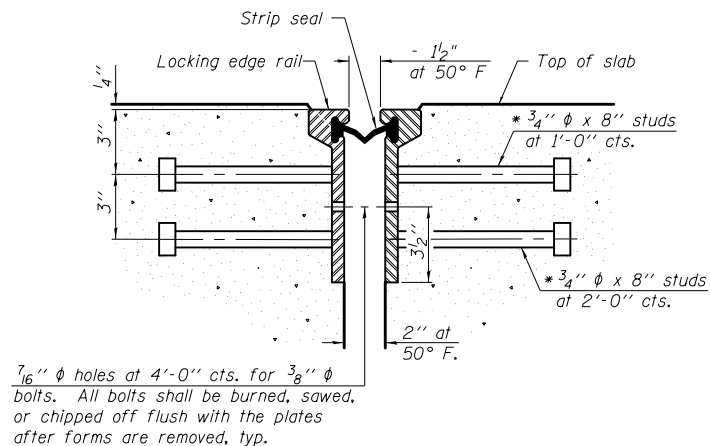
**SUBSTRUCTURE REPAIR DETAILS
S.N. 074-0037 (EB) & S.N. 074-0038 (WB)**

SCALE: SHEET 13 OF 23 SHEETS STA. TO STA.

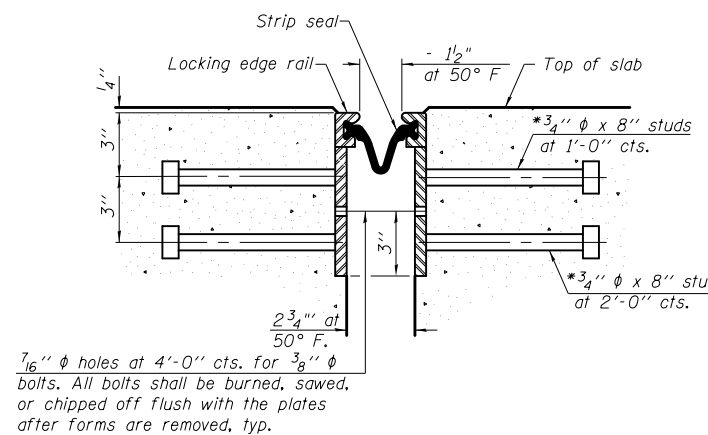
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	111
CONTRACT NO.				70717
ILLINOIS FED. AID PROJECT				



PLAN
(For skews ≤ 30°)

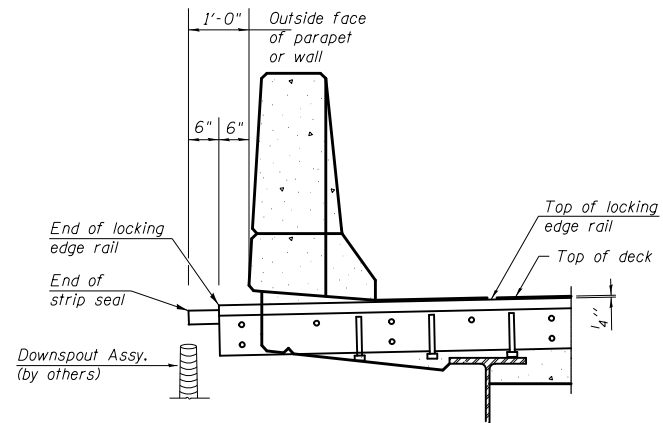


SECTION THRU ROLLED RAIL JOINT

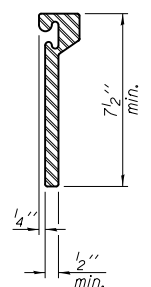


SECTION THRU WELDED RAIL JOINT

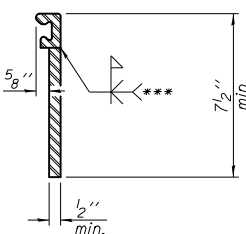
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



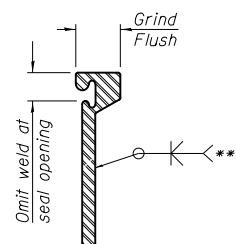
SECTION A-A
At Curb, Parapet or Wall



ROLLED EXTRUDED RAIL



WELDED RAIL



*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.
Rolled rail shown, welded rail similar.

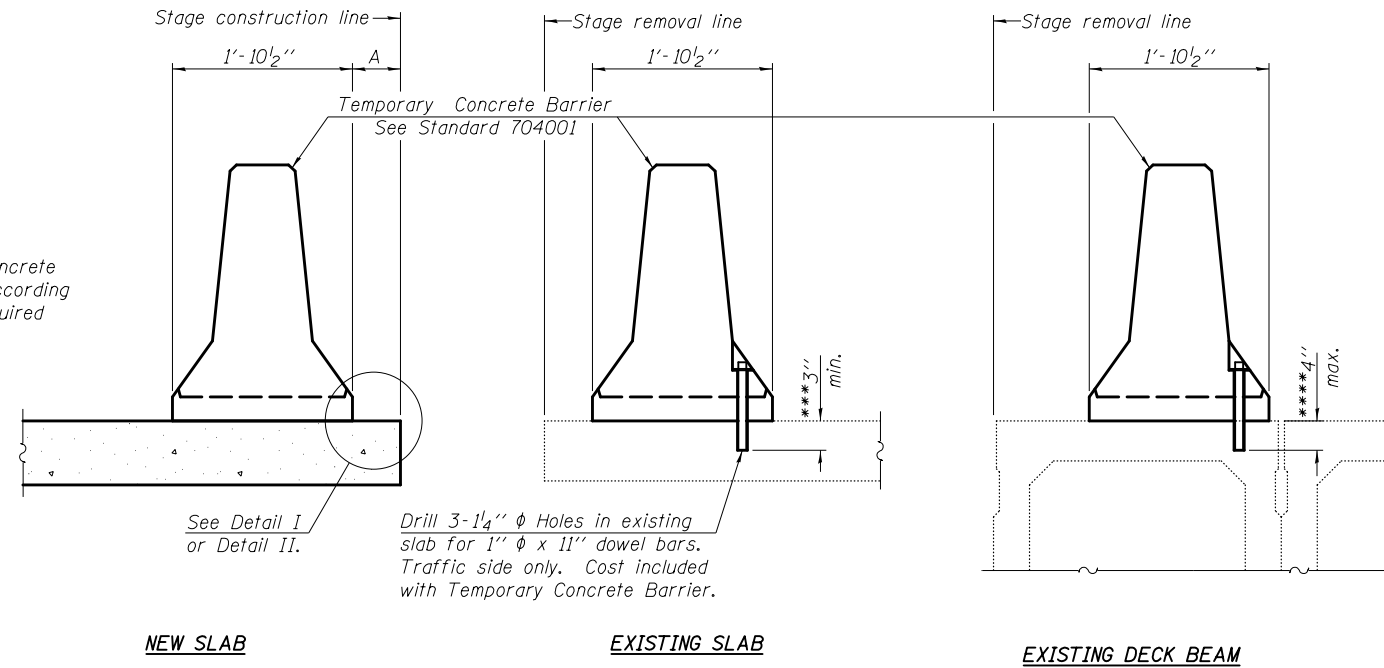
LOCKING EDGE RAILS

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
The manufacturer's recommended installation methods shall be followed.
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.
Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	196.0

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

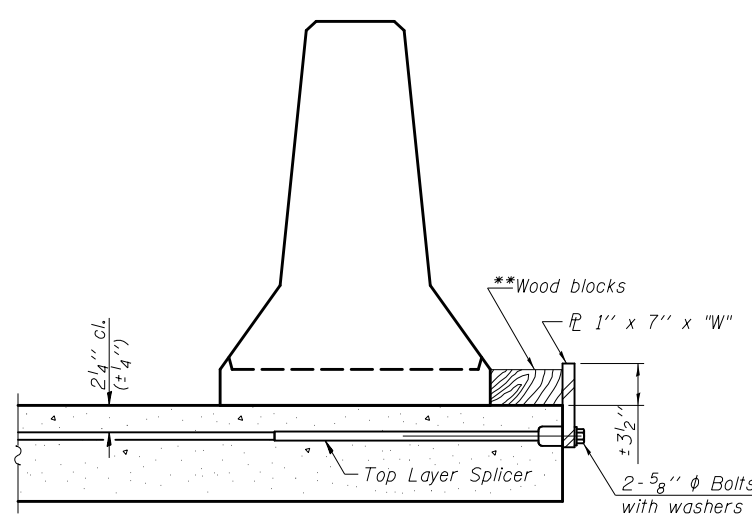
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

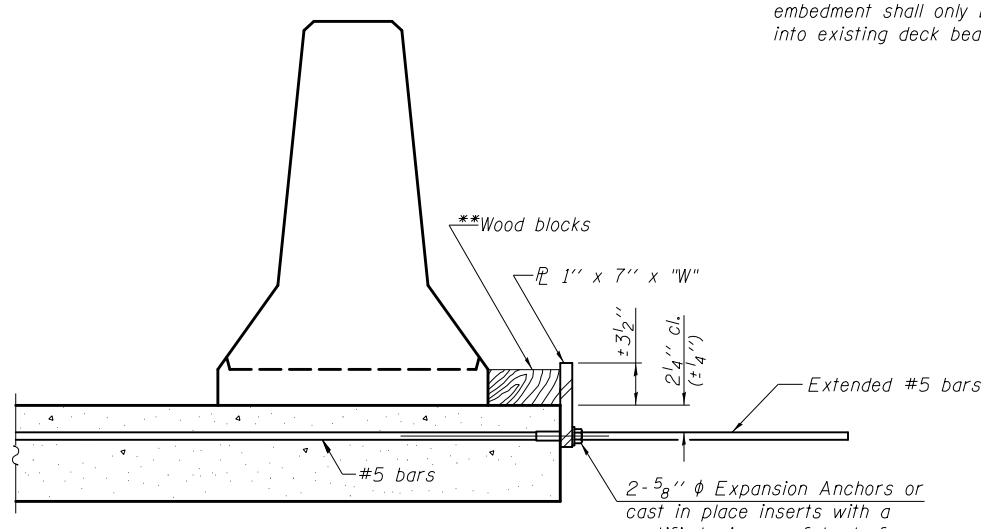
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

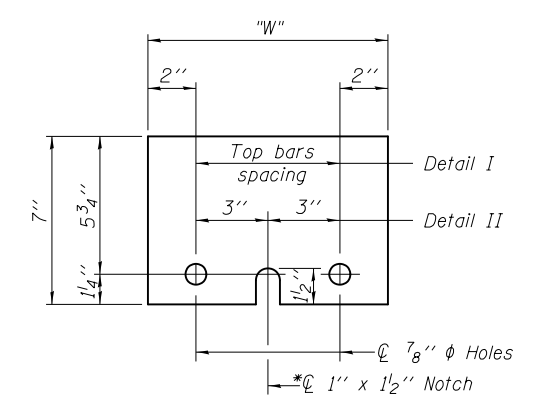
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER PL 1" x 7" x "W"

* Required only with Detail II

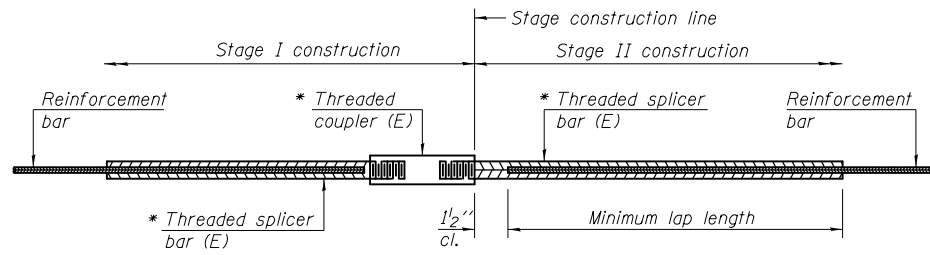
** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

R-27

7-1-10

FILE NAME =	USER NAME = eaglinge	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION S.N. 074-0037 (EB) & S.N. 074-0038 (WB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\midot\ea\linge\d0200193\0570717 Structure Repair Plans.sht.dgn	DRAWN -	REVISED -	74			(74-2)RS-2 & (74-3)RS-3	PIATT	310	114	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 70717							
PLOT DATE = 10/16/2014	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
		SCALE:			SHEET 16 OF 23 SHEETS STA. TO STA.					



STANDARD BAR SPLICER ASSEMBLY

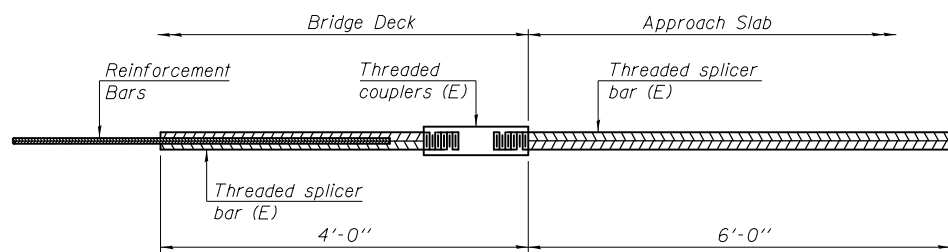
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

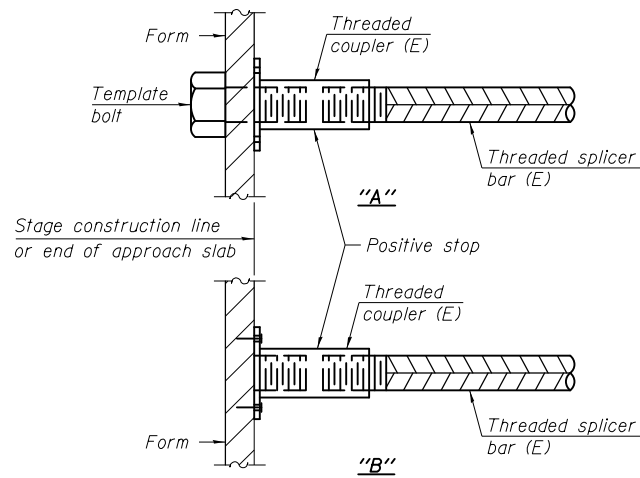
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Structure No.	Location	Bar size	No. assemblies required	Table for minimum lap length
074-0037	Deck Ends	6	32	3
	Hatch Blocks	6	6	3
074-0038	Deck Ends	6	32	3
	Hatch Blocks	6	6	3



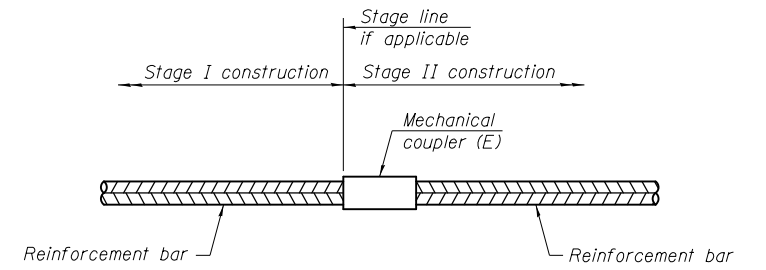
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



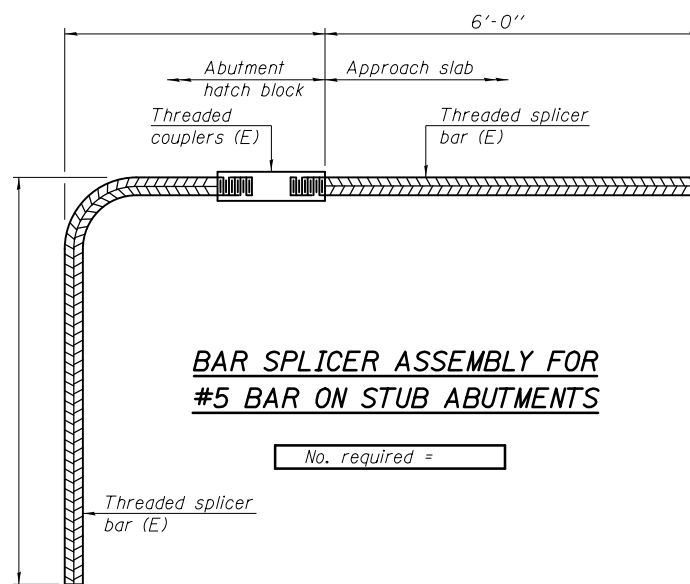
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 1-27-12

FILE NAME =	USER NAME = eaglinge	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
S.N. 074-0037 (EB) & S.N. 074-0038 (WB)

SCALE: SHEET 17 OF 23 SHEETS STA. TO STA.

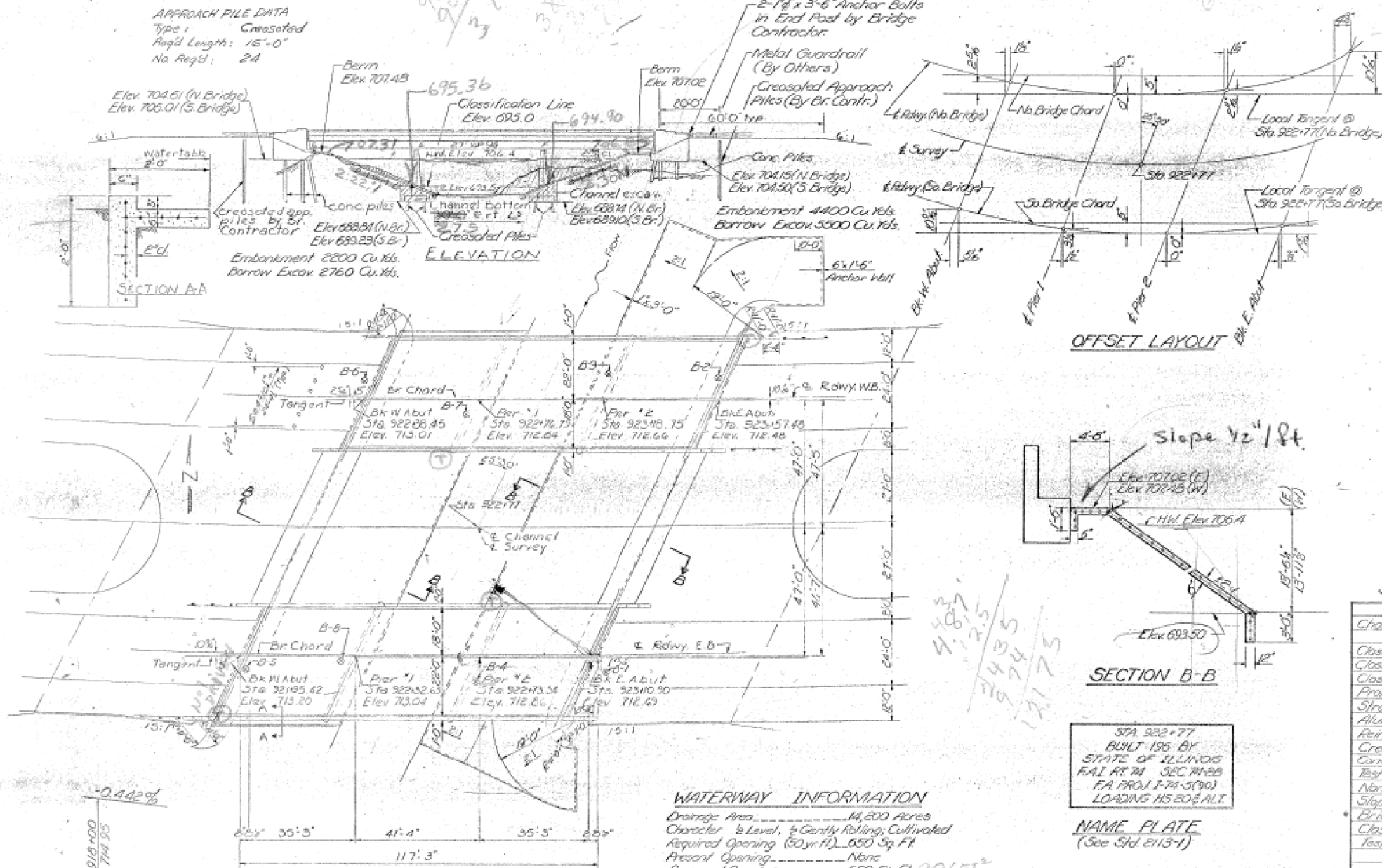
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	115
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				

AS-BUILT PLANS FOR INFORMATION ONLY

BM Railroad spike in 32' tree
West side of Creek Sta
922+65 FAI 74 115' Lt Elev 708.85

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 1	13 SHEETS
PROJECT NO. 74-28	PIATT 27 6
SHEET NO. 1	13 SHEETS



GENERAL NOTES

Slope Wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 55# per 100 Sq. Ft. All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Rivets 3/4", Open Holes 3/8", unless otherwise noted. Anchor Bolts shall be set before riveting diaphragms over supports.

Class A & B Excavation for structures includes excavation for slope wall. 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.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint.

Concrete piles of abutments shall be driven in holes pre-cored thru the embankment in accordance with Article 513.09(c) of the Standard Specifications. The Contractor shall drive two concrete test piles, one each of East Abut, North Bridge and West Abut, South Bridge, all in permanent locations, and two timber test piles in the vicinity of Pier 1 North Bridge, and Pier 2 South Bridge, as directed by the Engineer, before ordering the remaining piles. 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. Layout of slope walls may be varied to suit ground conditions in the field as directed by the Engineer. Diaphragm connections may be adapted to shop welding subject to approval by the Engineer.

TOTAL BILL OF MATERIALS

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu Yds			1500
Class A Excav for Structures	Cu Yds			30
Class B Excav for Structures	Cu Yds			540
Class X Concrete	Cu Yds	281.0	190.7	471.7
Protective Coat	Sq Yds	1250		1250
Structural Steel	Lbs.	172,070		172,070
Aluminum Poling	Lin Ft	455		455
Reinforcement Bars	Lbs.	78860	35080	113,940
Creosoted Piles (10 20')	Lin Ft		2360	2360
Concrete Piles	Lin Ft		1764	1764
Test Piles (Concrete)	Each		2	2
None Plates	Each		2	2
Slope Wall (6")	Sq Yds			1020
Bridge Seal Sealant	L.S.		1	1
Class A Concrete	Cu Yds		390.2	390.2
Test Piles (Timber)	Each		2	2

PROFILE RT. 74

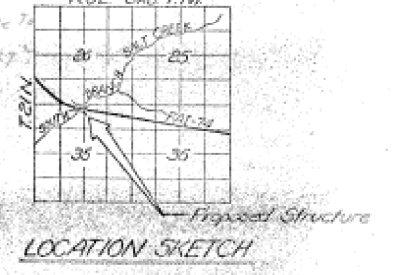
DESIGNED: Study's Inc.
CHECKED: [Signature]
DRAWN: S.G. Ferchow
CHECKED: [Signature]

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

DATE: FEBRUARY 8 1969

PLAN CURVE DATA

Δ	41°37'39"
R	3319.72'
T	1452.02'
L	2773.10'
E	255.63'
D	1'-30"
PI	912+64.92
PC	893+32.90
PT	923+03.00
SE	0.042%
SE TR	897+00 TO 899+00
	925+41 TO 927+41



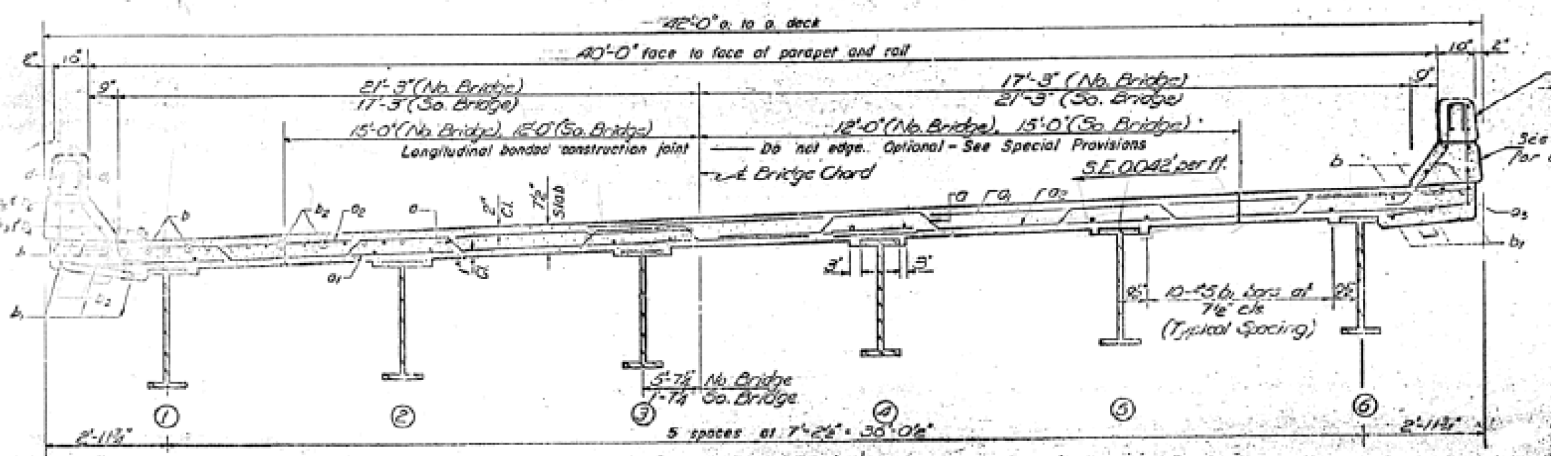
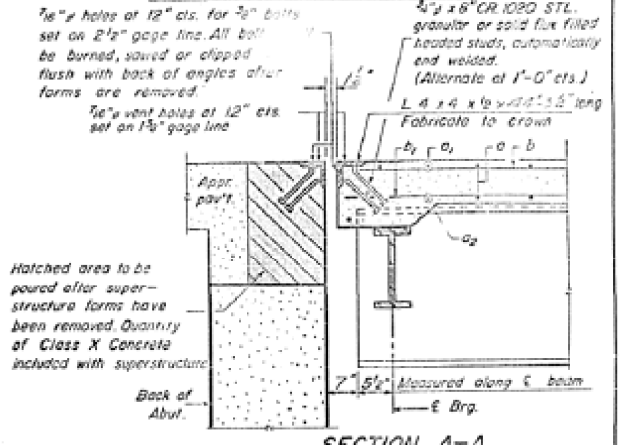
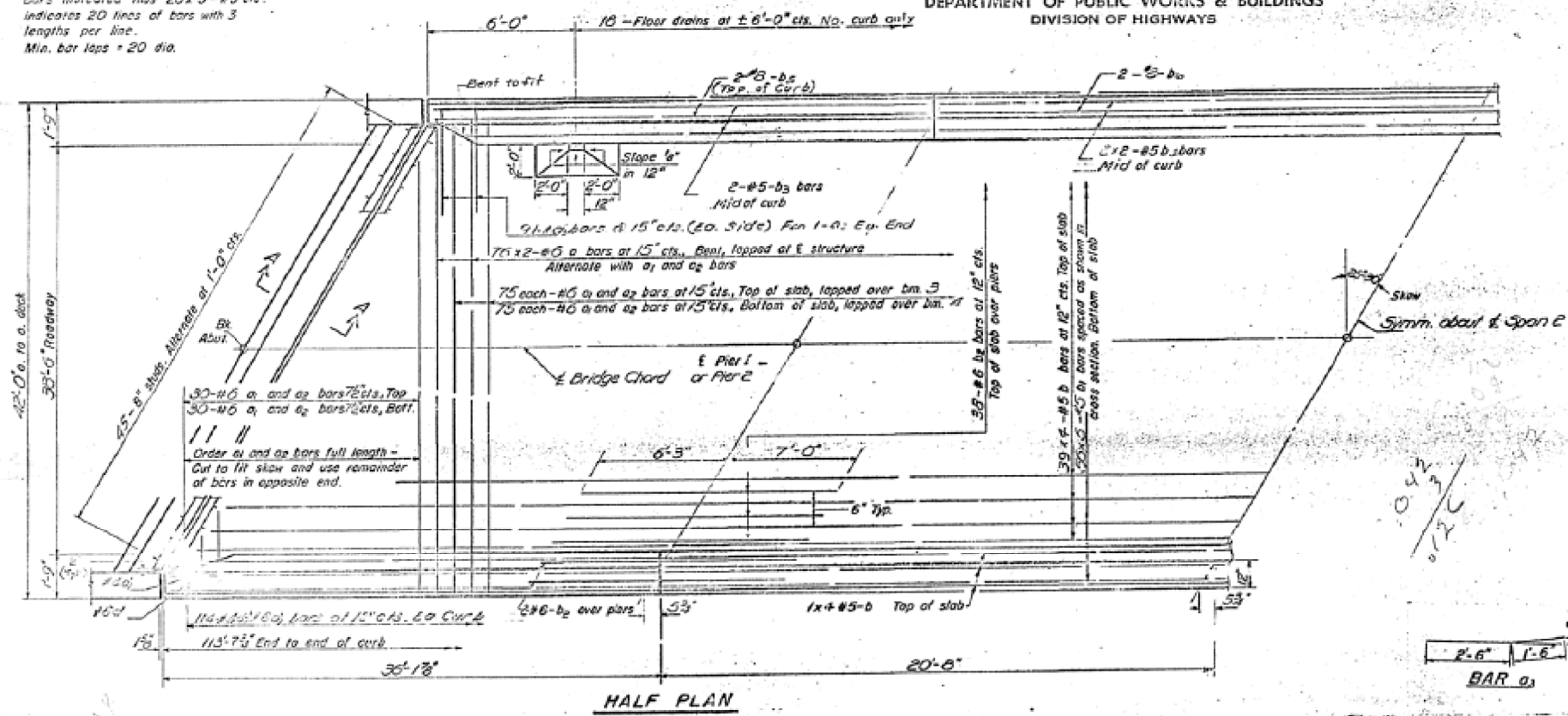
**GENERAL PLAN & ELEVATION
FAI RT. 74 OVER
SO. BRANCH OF SALT CREEK
PROJ. I-74-5(90)
FAI RT. 74 SECTION 74-2B
PIATT COUNTY
STA. 922+77**

AS-BUILT PLANS FOR INFORMATION ONLY

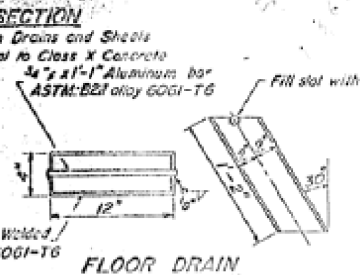
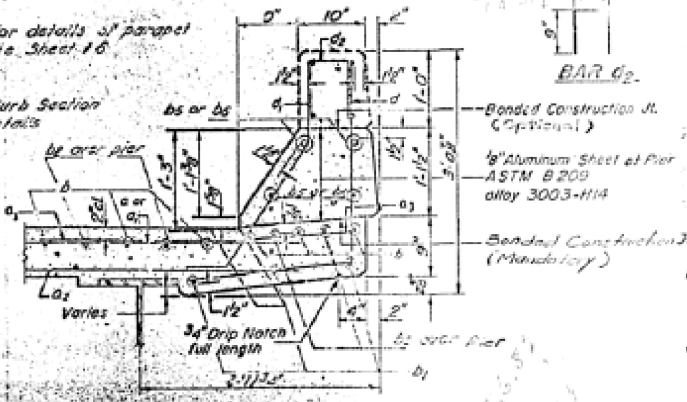
Note:
Bars indicated thus 20 x 3 - #5 etc.
indicates 20 lines of bars with 3
lengths per line.
Min. bar laps = 20 dia.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
74-25	PIATT	27	9
SHEET NO. 4			13 SHEETS



**CROSS SECTION
LOOKING EAST**



BAR a
TWO BRIDGES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	304	#6	22'-5"	
a1	420	#6	25'-6"	
a2	420	#6	18'-6"	
a3	384	#6	4'-0"	
b	560	#5	29'-3"	
b1	560	#5	25'-3"	
b2	168	#6	15'-0"	
b3	16	#5	35'-3"	
b4	16	#5	21'-3"	
b5	16	#5	32'-9"	
b6	8	#8	4'-0"	
c	450	#4	4'-7"	
d	450	#5	3'-5"	

Reinforcement Bars Lbs. 11570
 Structural Steel Lbs. 176012
 Class X Concrete Cu Yd 222.3

* Weight of bearing assemblies with lead plates, and anchor bolts are included as structural steel.
Est. Wt. = 11520 Lbs.

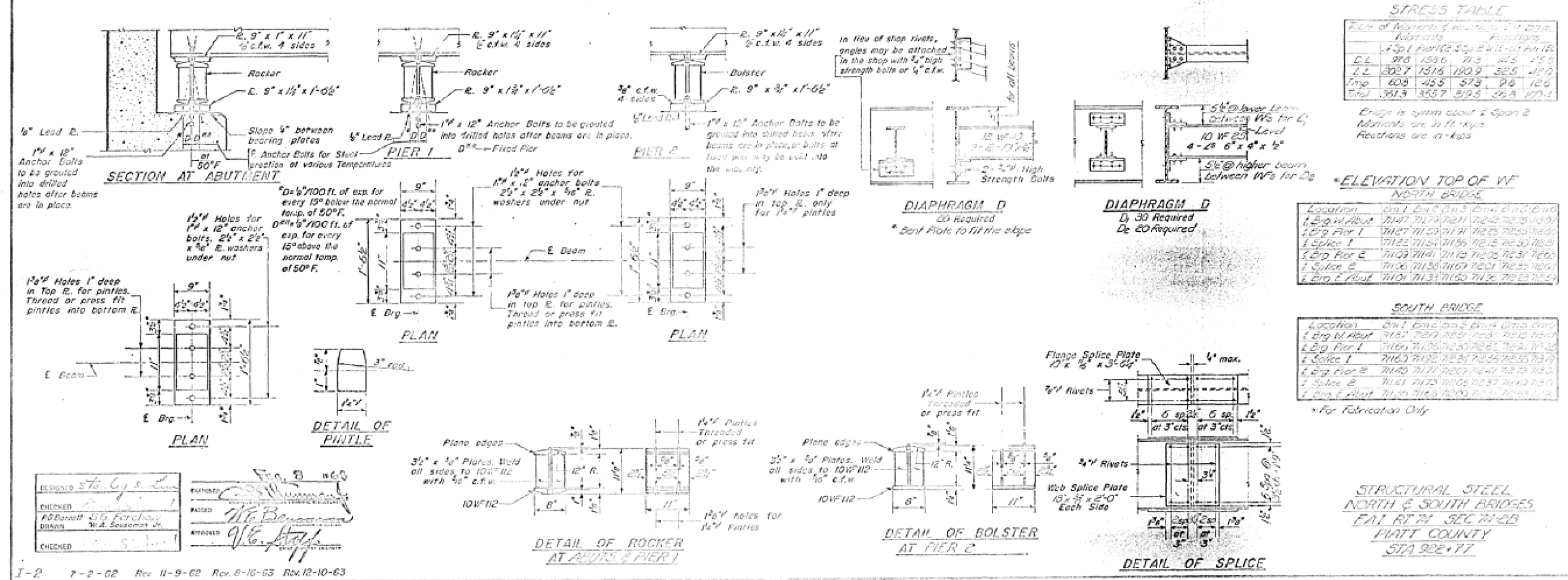
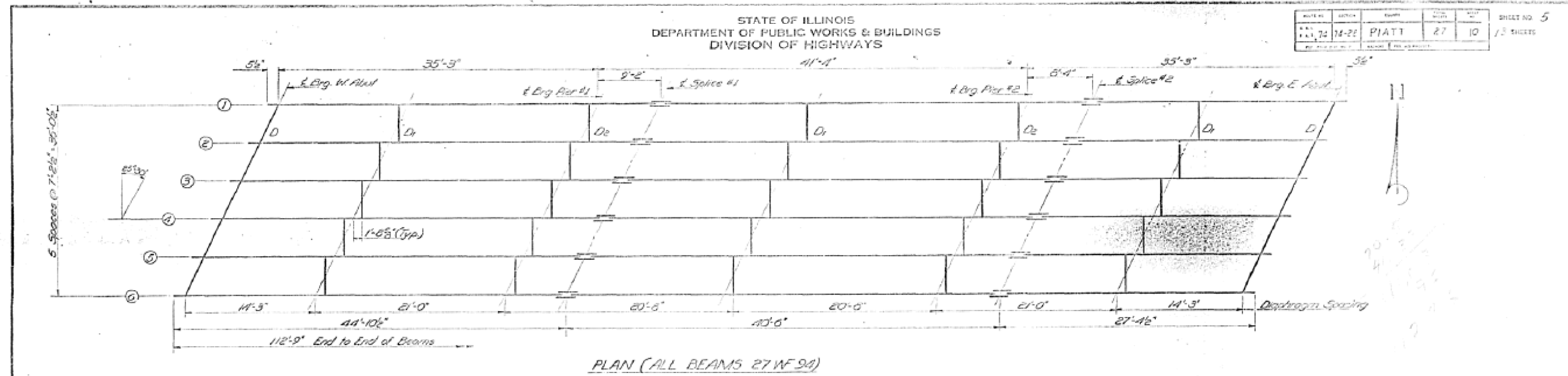
The lengths and quantities of longitudinal reinforcement and Class X Concrete in parapets are not included in above quantities. See sheet 0.

DESIGNED: *[Signature]*
 CHECKED: *[Signature]*
 DRAWN: *[Signature]*
 CHECKED: *[Signature]*

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

I-6-L(14°) 8-1-65 Rev. 1-11-66
 MODIFIED

AS-BUILT PLANS FOR INFORMATION ONLY



STRESS TABLE

Units of Moments & Reactions in kips-ft.

Location	CL	LL	Imp	Total
1 Sp. 1 Pier 12.50' E. W. 1st Pier 12.50'	978	153.6	71.3	1202.9
1 Sp. 2 Pier 21.00' E. W. 2nd Pier 21.00'	802.7	131.6	190.9	1125.2
1 Sp. 3 Pier 30.00' E. W. 3rd Pier 30.00'	608	45.5	57.3	710.8
1 Sp. 4 Pier 39.00' E. W. 4th Pier 39.00'	361.3	35.7	39.3	436.3

Bridge is symm about L. Span 2
Moments are in ft-kips
Reactions are in-kips

ELEVATION TOP OF WF NORTH BRIDGE

Location	Sta 1	Sta 2	Sta 3	Sta 4	Sta 5	Sta 6
1. Erg. W. Abut	7147	7179	7211	7243	7275	7307
1. Erg. Pier 1	7187	7153	7119	7085	7051	7017
1. Splice 1	7122	7154	7186	7218	7250	7282
1. Erg. Pier 2	7103	7141	7179	7217	7255	7293
1. Splice 2	7106	7138	7170	7202	7234	7266
1. Erg. E. Abut	7101	7133	7165	7197	7229	7261

SOUTH BRIDGE

Location	Sta 1	Sta 2	Sta 3	Sta 4	Sta 5	Sta 6
1. Erg. W. Abut	7157	7201	7245	7289	7333	7377
1. Erg. Pier 1	7169	7135	7101	7067	7033	6999
1. Splice 1	7163	7195	7227	7259	7291	7323
1. Erg. Pier 2	7145	7177	7209	7241	7273	7305
1. Splice 2	7141	7173	7205	7237	7269	7301
1. Erg. E. Abut	7135	7167	7199	7231	7263	7295

*For Fabrication Only

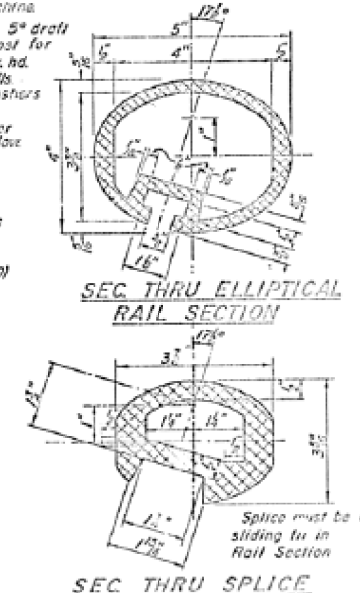
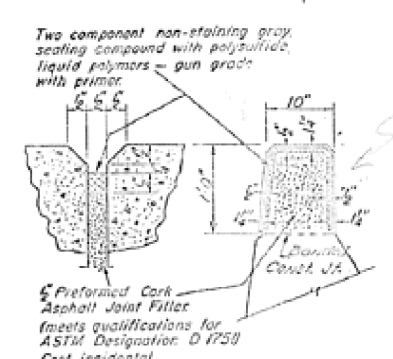
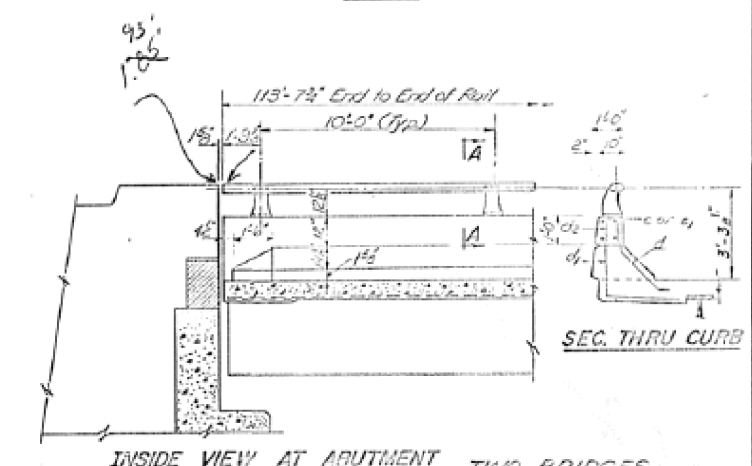
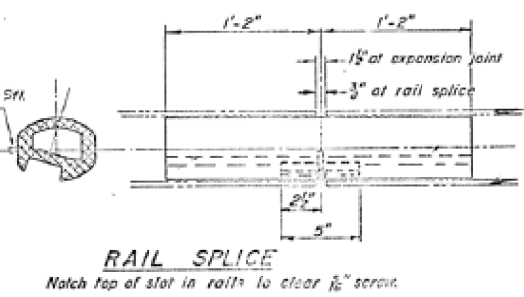
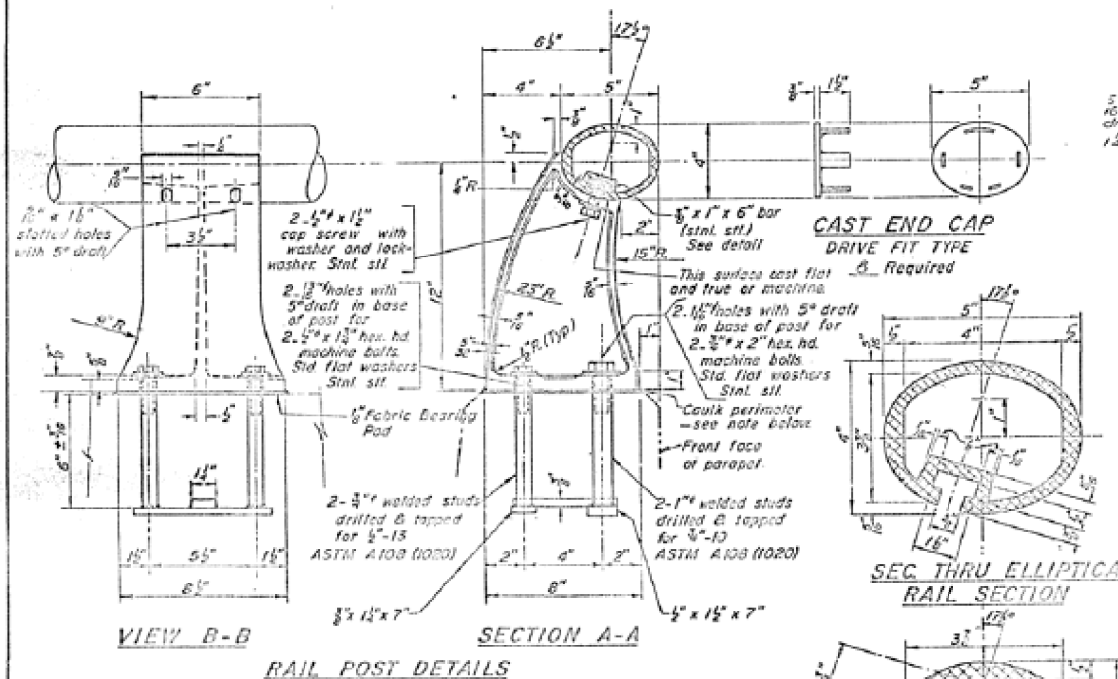
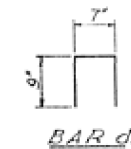
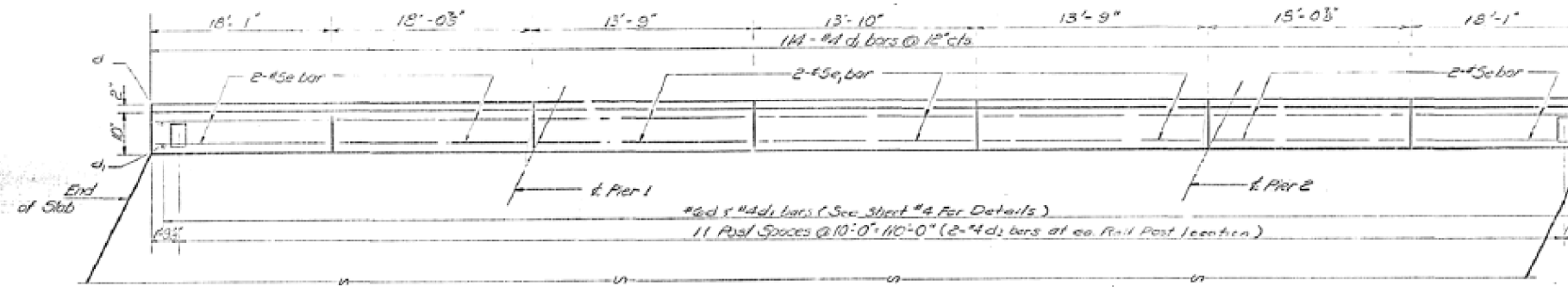
DESIGNED: *Sto. by S. Linn*
 CHECKED: *[Signature]*
 DRAWN: *[Signature]*
 APPROVED: *[Signature]*

I-2 7-2-62 Rev 11-9-62 Rev 8-16-63 Rev 12-10-63

AS-BUILT PLANS FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

DRAWING NO.	SECTION	COUNT	DATE	SHEET NO.
74-25	PIATT	27	11	11
SHEETS				



NOTES:

All Aluminum Alloy Extruded rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2500 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

Provide 1-1/2" and 2-1/2" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground, and low spots shimmed.

Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.

Aluminum alloy rail shall conform to ASTM B 221 alloy 6061-T6 or 6351-T5 with min yield 35 ksi, min. tensile 53 ksi, and elongation of 10% in 2 inches.

**TWO BRIDGES
PARAPETS & RAILS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
e	24	#5	17'-0"	
e	25	#5	13'-0"	
d	26	#4	2'-1"	
Class X Concrete				
Reinforcement Bars				
Aluminum Fencing				
			Cu. Yds.	14.7
			Lbs.	50.0
			Lm. Ft.	455

d' d, bars filled on Sheet "A"

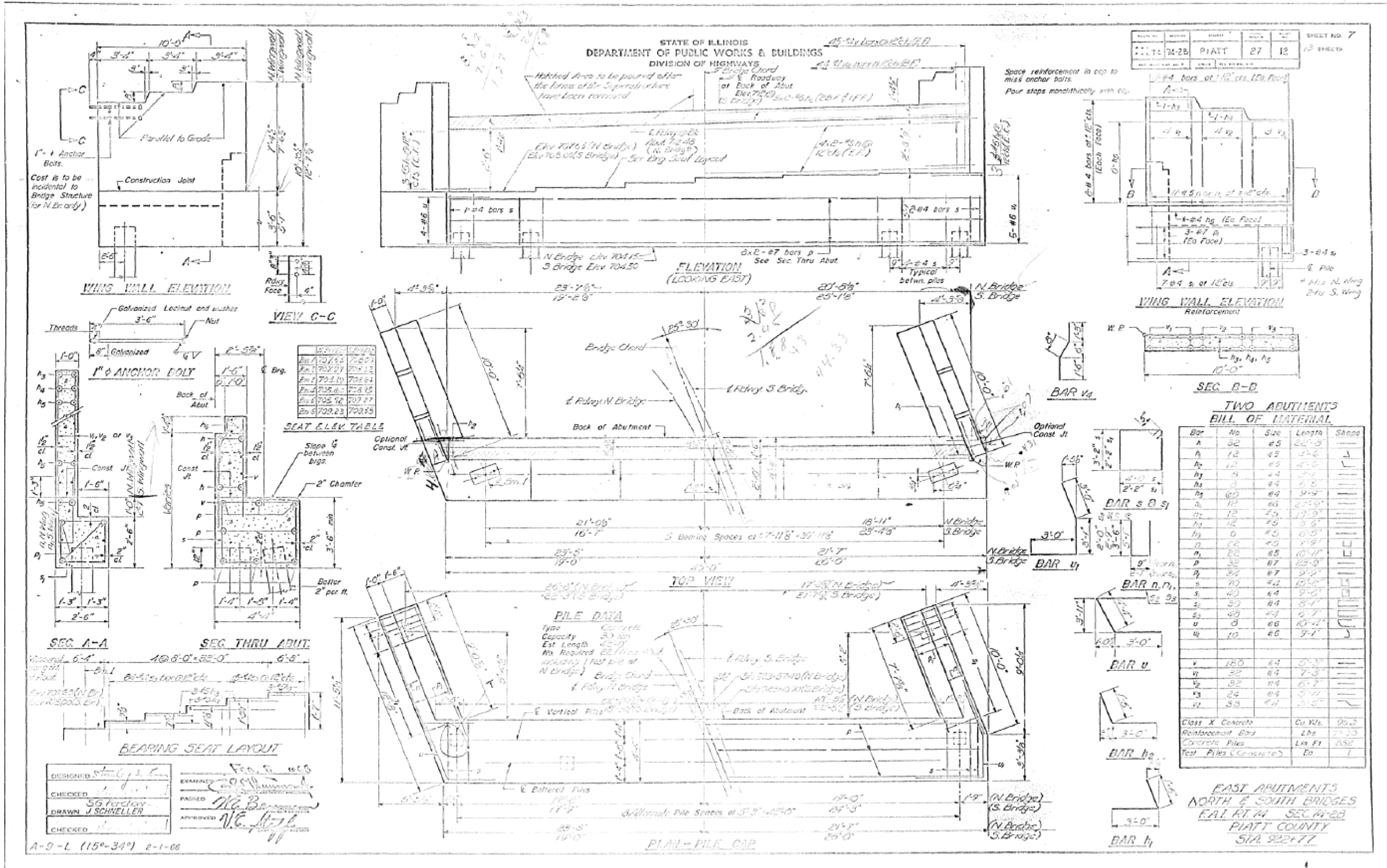
**ALUMINUM RAILING
NORTH & SOUTH BRIDGES
FAI RT 74 SEC 21-26
PIATT COUNTY
STA 922+17**

DESIGNED: *[Signature]*
CHECKED: *[Signature]*
DRAWN: M. B. B.
CHECKED: *[Signature]*

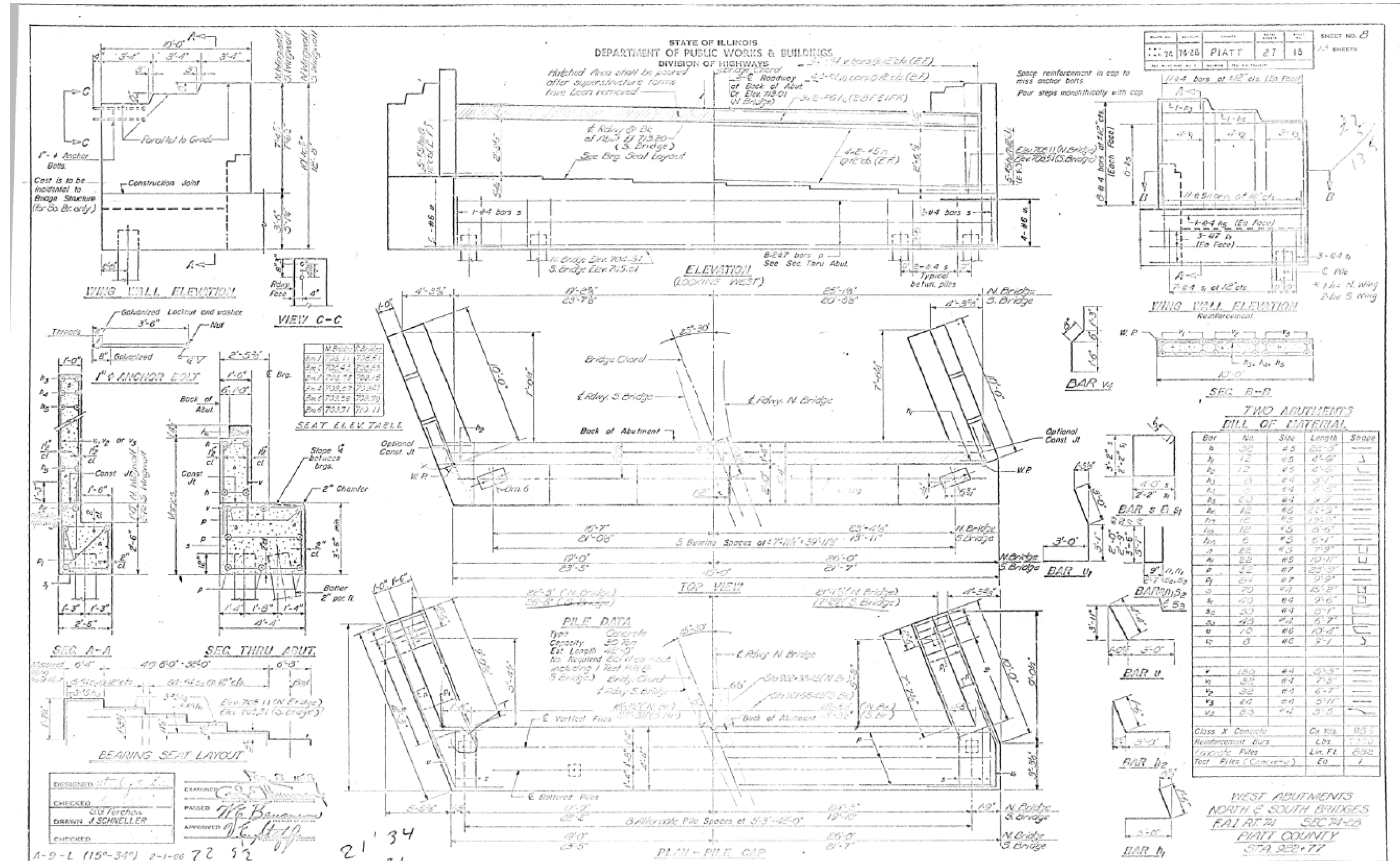
EXAMINED: *[Signature]*
PASSED: *[Signature]*
APPROVED: *[Signature]*

R-17 Rev 10-8-65 1-5-66

AS-BUILT PLANS FOR INFORMATION ONLY



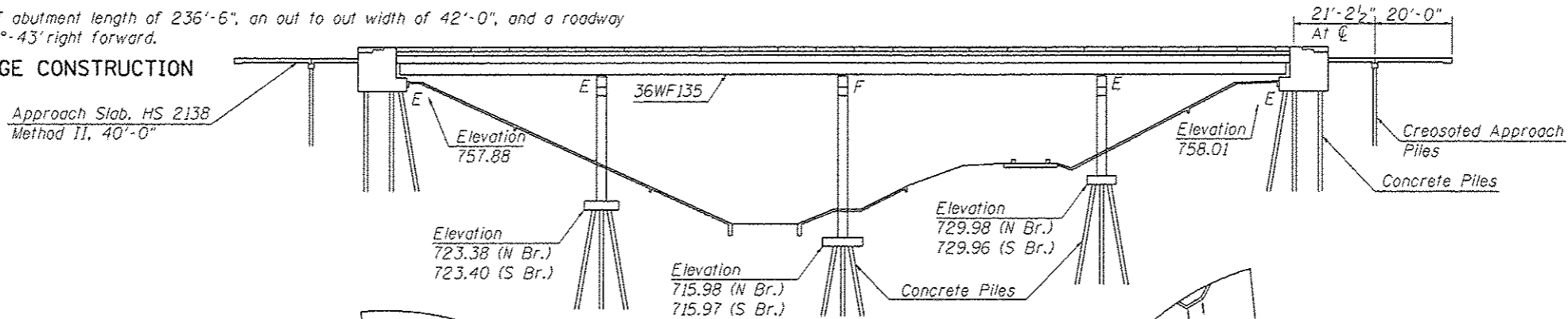
AS-BUILT PLANS FOR INFORMATION ONLY



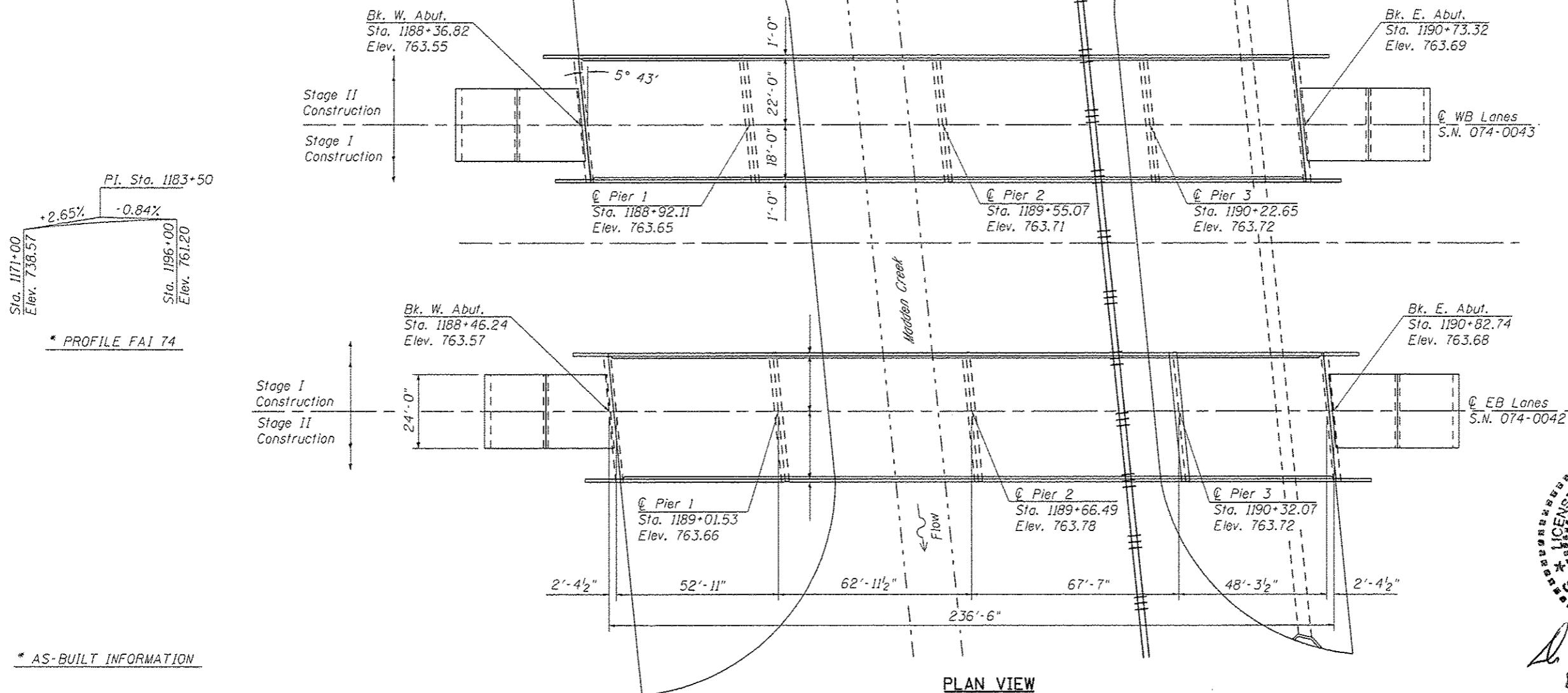
Structures 074-0042 & 074-0043 were built in 1970 as FAI-74, Section 74-3BVB at Station 1190+07.53 by the State of Illinois in Piatt County. In 1975, the structure received new expansion joints, a waterproofing membrane system and 1 3/4" H.M.A. wearing surface as Section District 5 Waterproofing 1975-3. In 2003, the structures received a new 1" Polymer Bituminous Concrete Surface course with Section 74(3RS-2, 4-1-RS-1). The structures are four span 1 1/2" reinforced concrete deck, continuous steel beam bridges with Polymer Bituminous Concrete Surface course on concrete pile supported piers and abutments.

The existing structure has a back to back of abutment length of 236'-6", an out to out width of 42'-0", and a roadway width of 38'-6". The structure is skewed 5°-43' right forward.

Method of Construction: STAGE CONSTRUCTION



ELEVATION VIEW
(Elevations from As-Built Plans for Perspective Only)



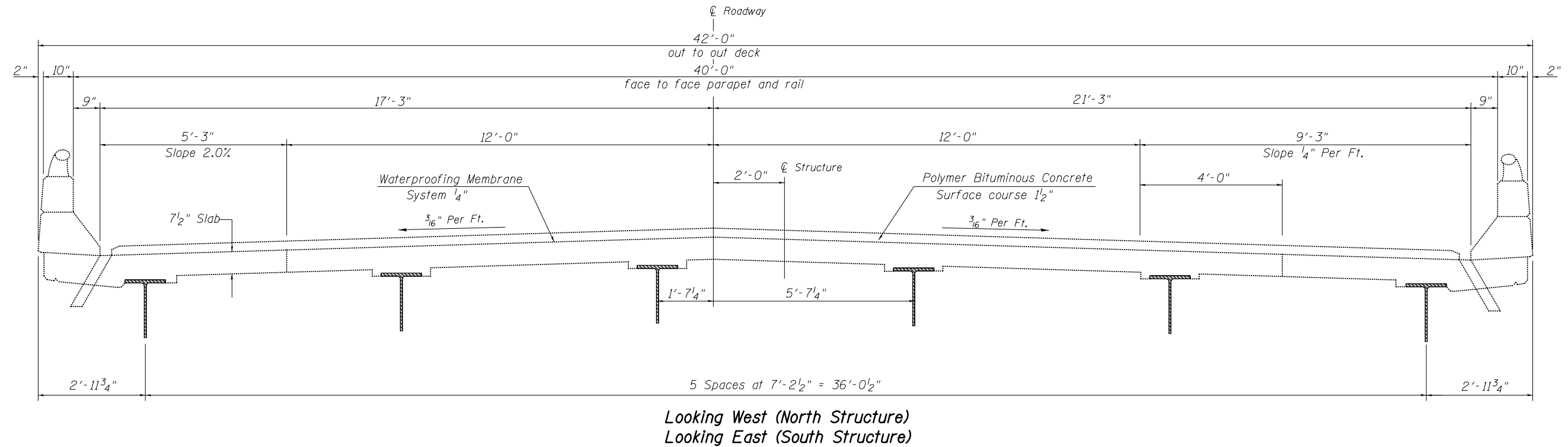
PLAN VIEW



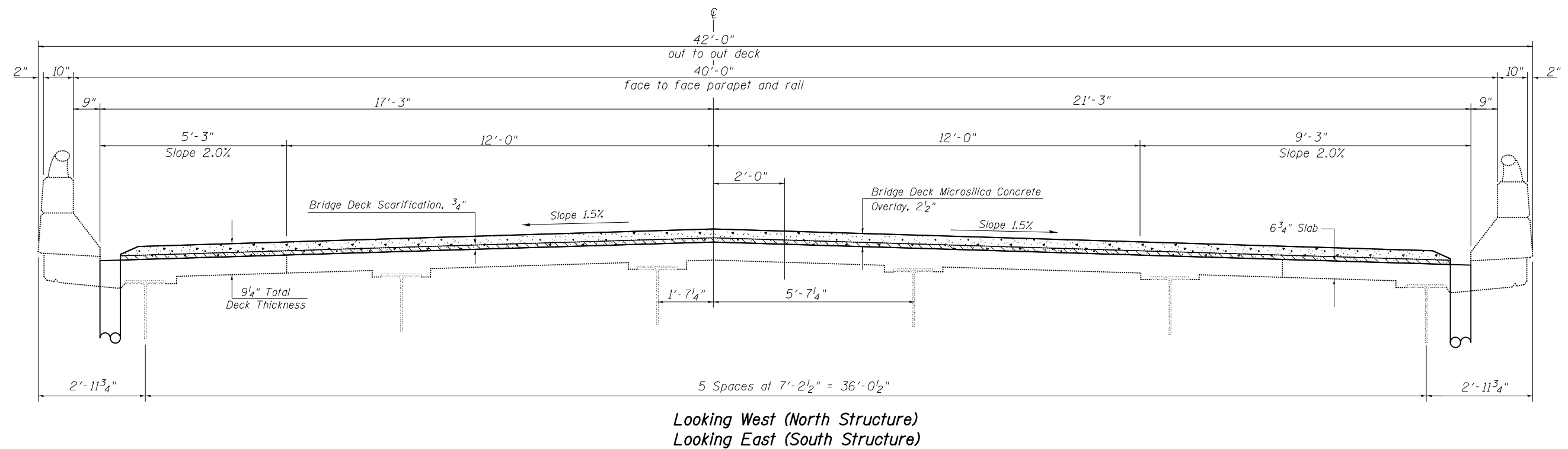
David Carl Puzey 12/4/14
Expires 11/30/16

FILE NAME :	USER NAME : eaglinge	DESIGNED -	ESS	REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwworking\puzidot\ee\glinge\d0200193\0574	717 Structure Repair Plans.sht.dgn	DRAWN -	ESS	REVISED -			74	(74-2IRS-2 & (74-3IRS-3	PIATT	309	122		
	PLOT SCALE = 40.0000 "/ in.	CHECKED -	TJB	REVISED -			S.N. 074-0042 (EB) & S.N. 074-0043 (WB)		CONTRACT NO. 70717				
	PLOT DATE = 10/16/2014	DATE -	2-4-2013	REVISED -			SCALE:	SHEEY 1 OF 28 SHEETS	STA.	TO STA.	[ILLINOIS] FED. AID PROJECT		

EXISTING CROSS SECTION S.N. 074-0042 (EB) & S.N. 074-0043 (WB)



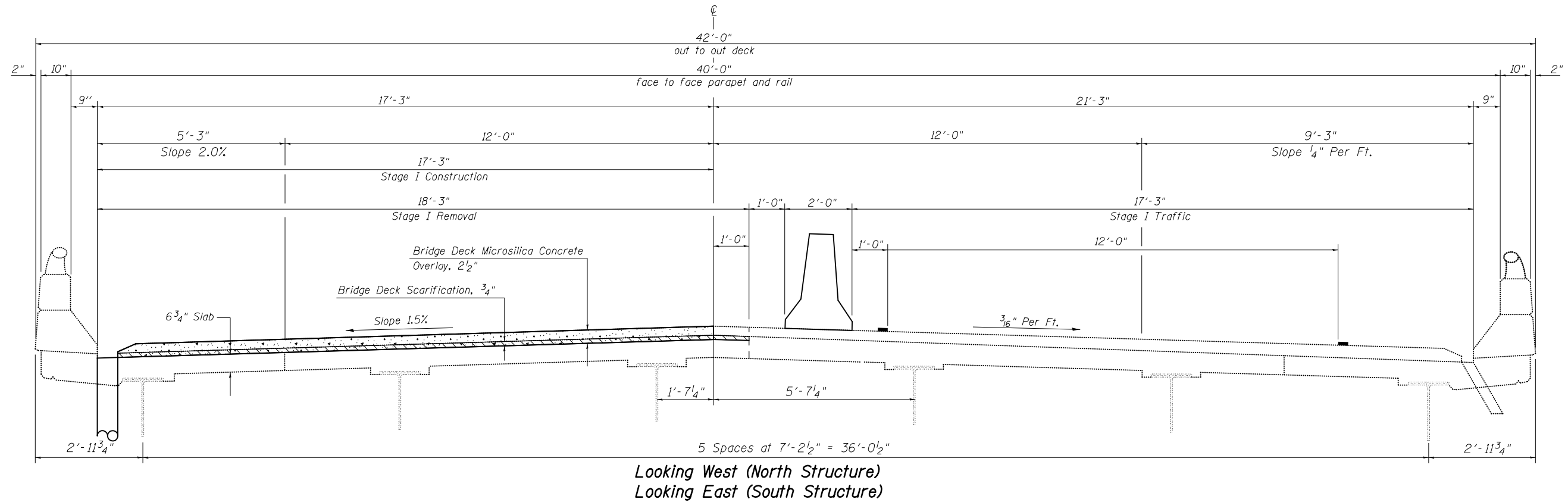
PROPOSED CROSS SECTION S.N. 074-0042 (EB) & S.N. 074-0043 (WB)



FILE NAME =	USER NAME = eaglinge	DESIGNED - RTC	REVISED - ESS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL DECK CROSS SECTIONS S.N. 074-0042 (EB) & S.N. 074-0043 (WB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	717 Structure Repair Plans.sht.dgn	DRAWN - RTC	REVISED - ESS			74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	124	
	PLOT SCALE = 40.0000' / in.	CHECKED - TJB	REVISED -			CONTRACT NO. 70717					
	PLOT DATE = 10/16/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

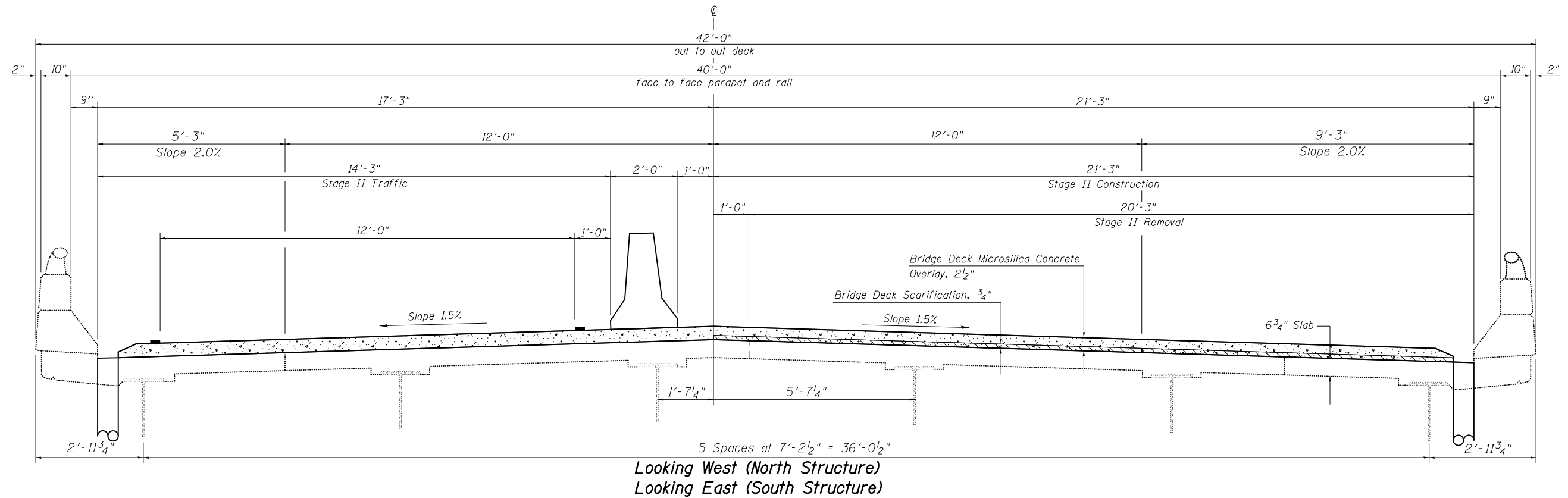
STAGE I CONSTRUCTION DETAILS

S.N. 074-0042 (EB) & S.N. 074-0043 (WB)



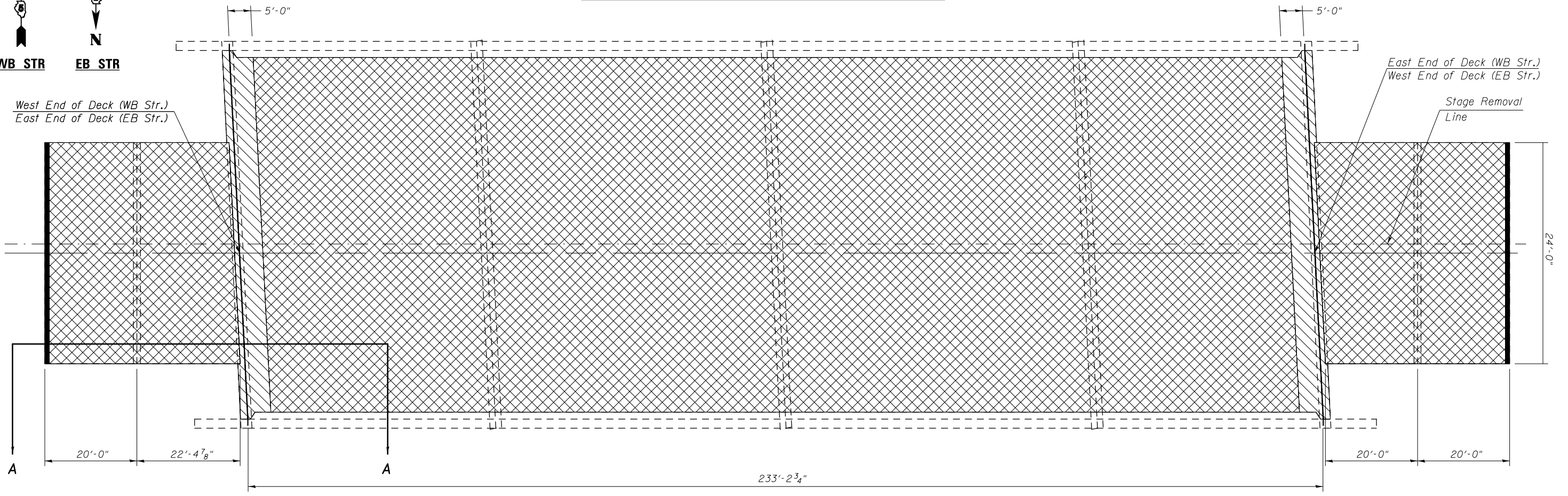
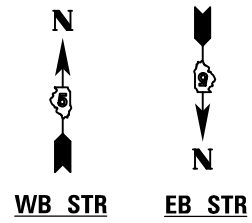
STAGE II CONSTRUCTION DETAILS

S.N. 074-0042 (EB) & S.N. 074-0043 (WB)

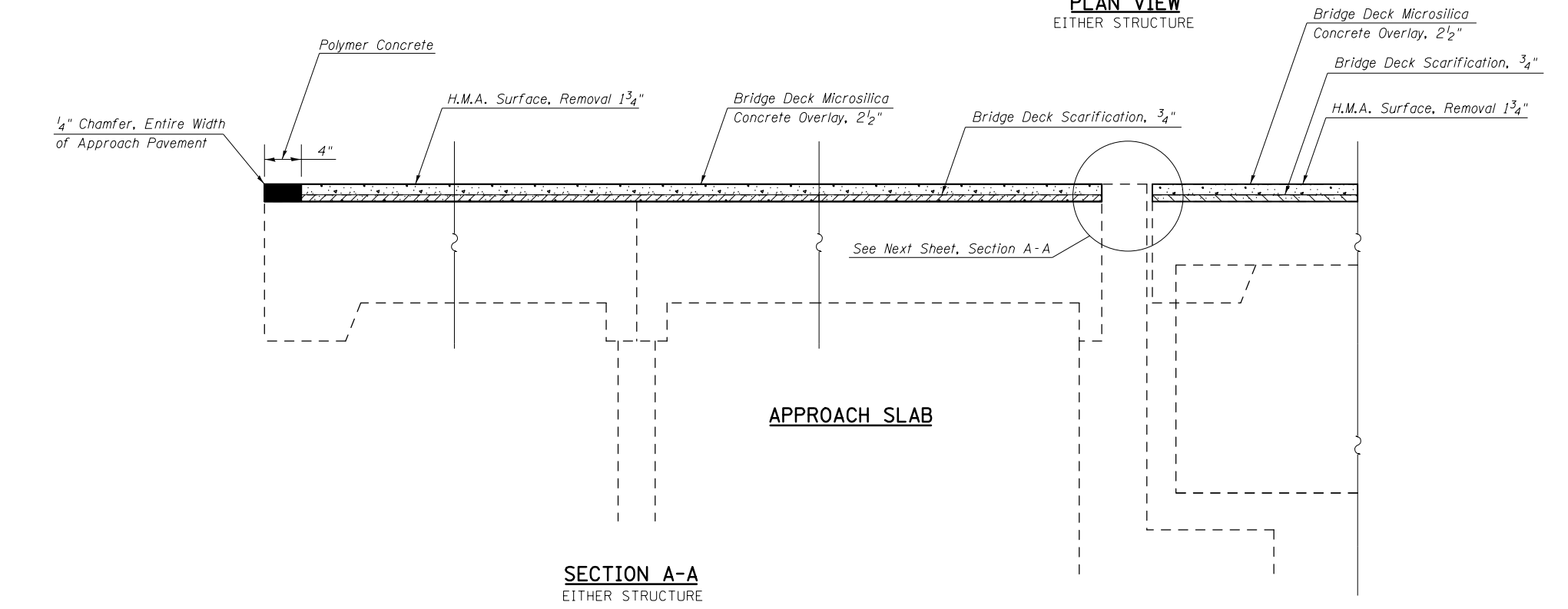


FILE NAME =	USER NAME = eaglinge	DESIGNED - RTC	REVISED - ESS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE CONSTRUCTION DETAIL S.N. 074-0042 (EB) & S.N. 074-0043 (WB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - RTC	REVISED - ESS			74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	125	
		CHECKED - TJB	REVISED -			CONTRACT NO. 70717					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

WEARING SURFACE PLAN S.N. 074-0042 & S.N. 074-0043



PLAN VIEW
EITHER STRUCTURE



SECTION A-A
EITHER STRUCTURE

- H.M.A. Surface Removal (Deck) & Bridge Deck Microsilica Concrete Overlay
- H.M.A. Surface Removal (Deck) & concrete Superstructure

BILL OF MATERIALS

ITEM	UNIT	TOTAL
H.M.A. SURFACE REMOVAL (DECK)	SQ YD	1216.0
H.M.A. SURFACE REMOVAL (ASBESTOS)	SQ YD	1216.0
BRIDGE DECK GROOVING	SQ YD	2334.0
BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2 1/2"	SQ YD	2342.0
BRIDGE DECK SCARIFICATION 3/4"	SQ YD	2344.0
POLYMER CONCRETE	SQ FT	32.0

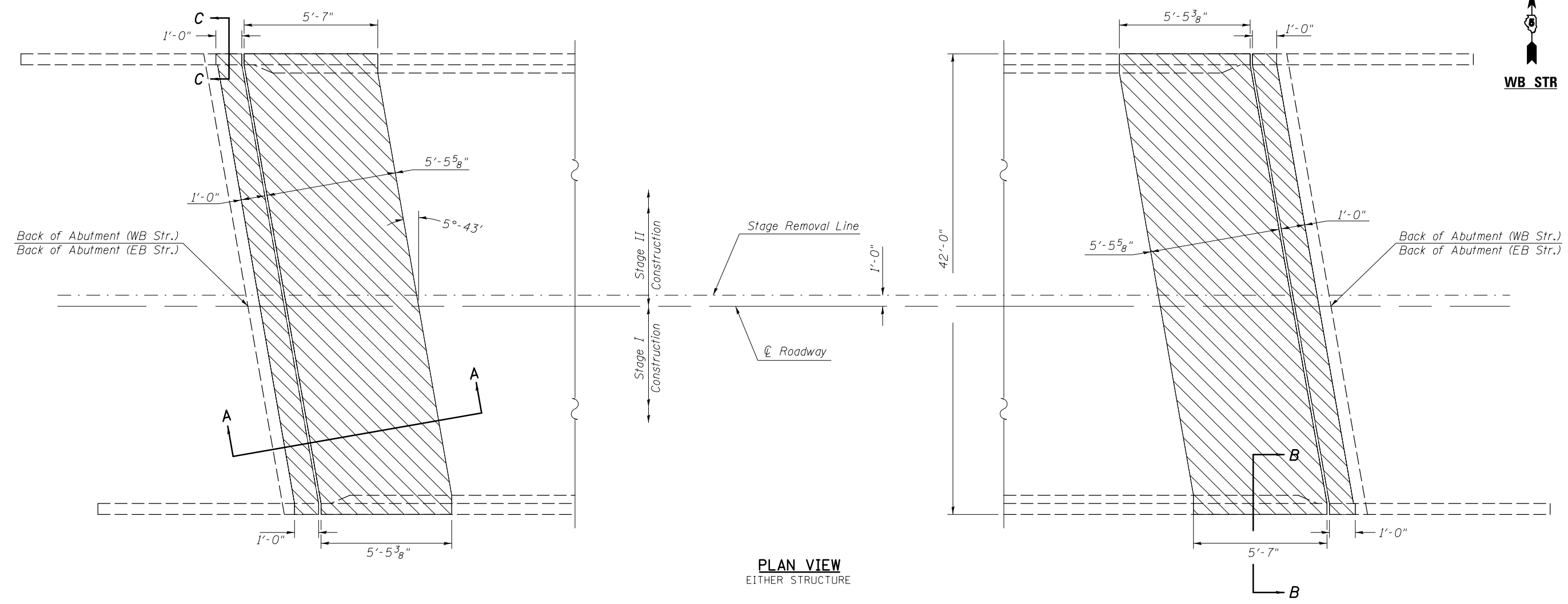
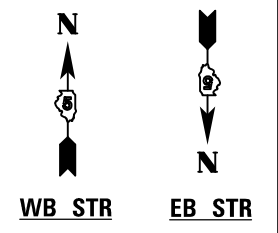
* The H.M.A. Surface for Structure 074-0043 has been found to contain ASBESTOS

FILE NAME =	USER NAME = eaglinge	DESIGNED - ESS	REVISED -
ct:\pw\work\p\idot\ea\linge\d\200193\0570717 Structure Repair Plans-sht.dgn		DRAWN - ESS	REVISED -
	PLOT SCALE = 40.0000' / in.	CHECKED - TJB	REVISED -
	PLOT DATE = 10/16/2014	DATE - 1-25-2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

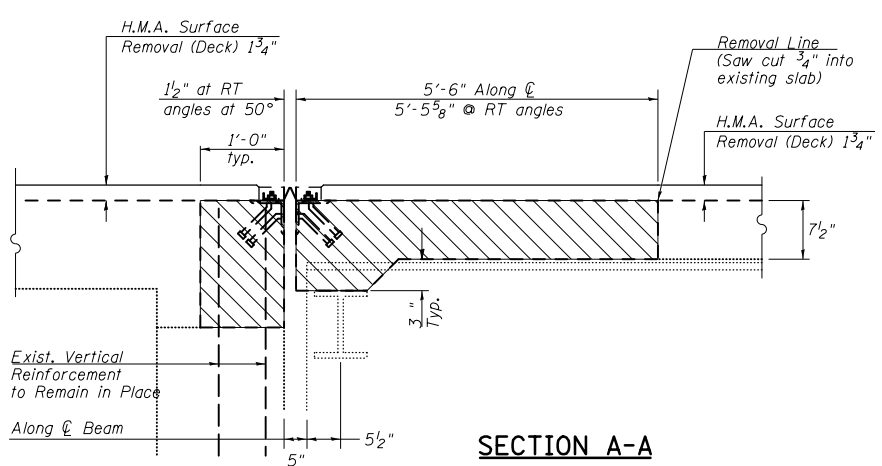
WEARING SURFACE DETAILS	
S.N. 074-0042 (EB) & S.N. 074-0043 (WB)	
SCALE:	SHEET 5 OF 28 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	126
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				

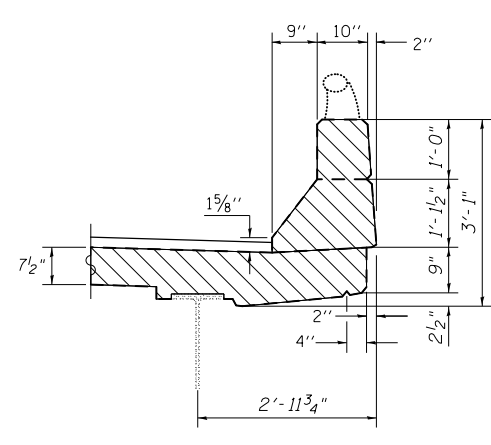


PLAN VIEW
EITHER STRUCTURE

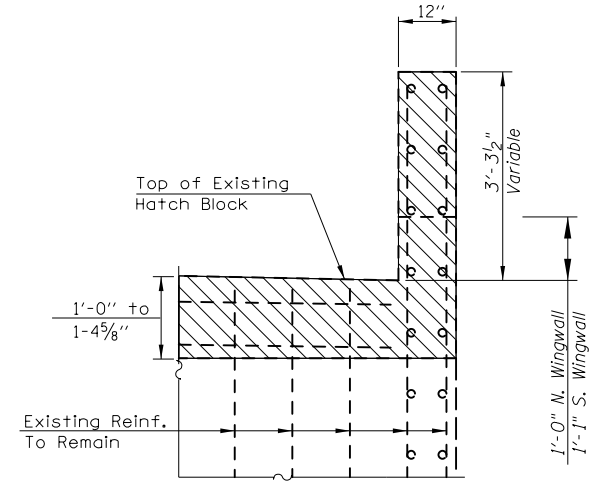
Concrete Removal



SECTION A-A
Showing Concrete Removal Limits
at Abutments and Deck Ends



SECTION B-B
Showing Concrete Removal Limits
at Parapets and Deck Ends



SECTION C-C
Showing Concrete Removal Limits
at Hatch Blocks and Wings

NOTES:

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the New construction. Any reinforcement bars that are damaged during Concrete Removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

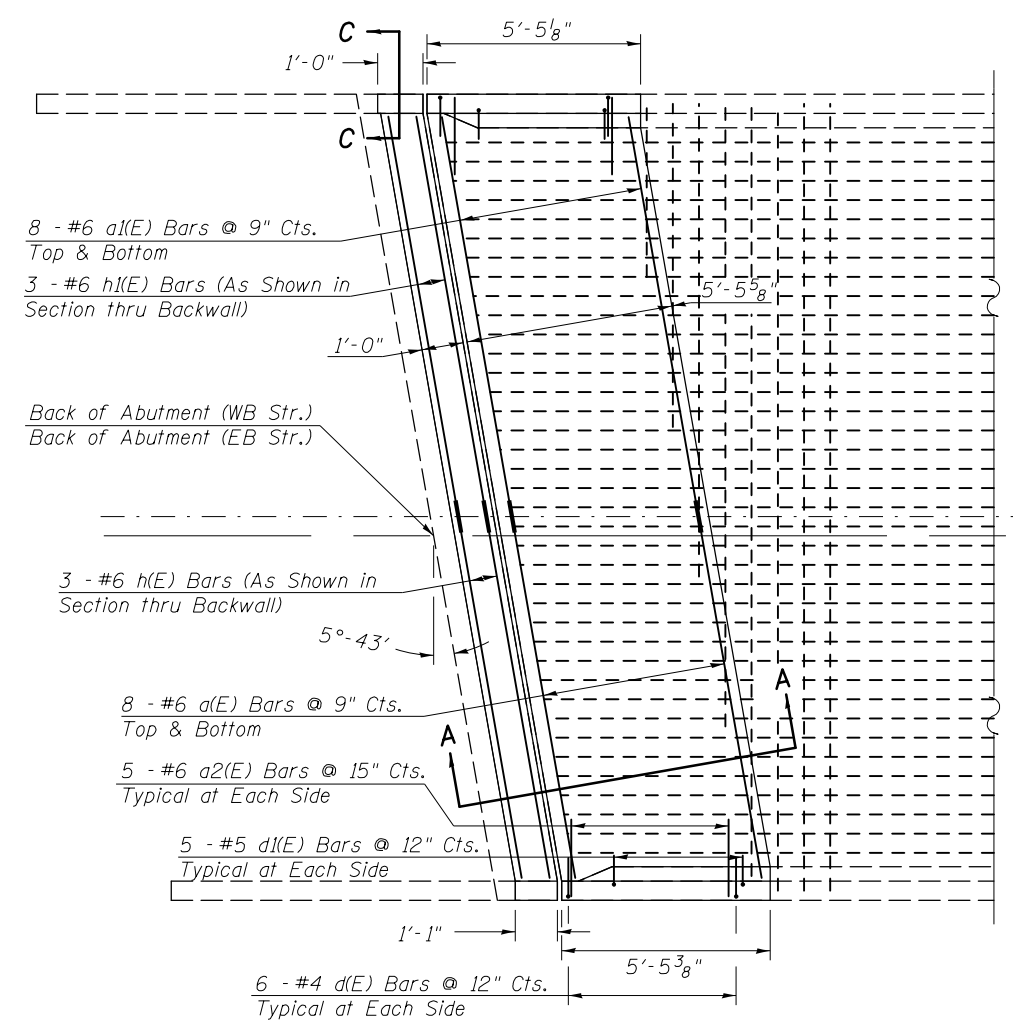
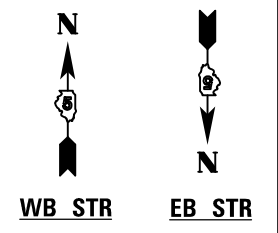
The existing expansion joint system shall be removed completely, as well as any foreign material that has accumulated or been placed in the joint openings. The cost for this work is included in Concrete Removal and no additional compensation will be allowed.

The handrail attached to the top of the parapets shall be unbolted to allow for the removal and placement of the parapet ends. Following completion of the parapet ends, the handrail shall be re-attached. The cost of this work shall be included in Concrete Removal & Concrete Superstructures.

All existing deck tie downs shall be removed. Cost included with Concrete Removal.

BILL OF MATERIALS

ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	35.7



8 - #6 a1(E) Bars @ 9" Cts.
Top & Bottom

3 - #6 h1(E) Bars (As Shown in
Section thru Backwall)

1'-0"

Back of Abutment (WB Str.)
Back of Abutment (EB Str.)

3 - #6 h(E) Bars (As Shown in
Section thru Backwall)

5°-43'

8 - #6 a(E) Bars @ 9" Cts.
Top & Bottom

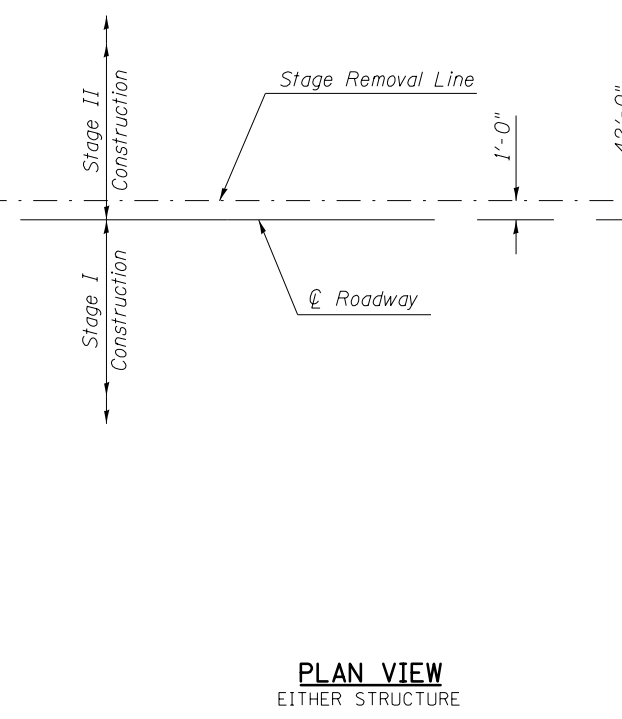
5 - #6 a2(E) Bars @ 15" Cts.
Typical at Each Side

5 - #5 d1(E) Bars @ 12" Cts.
Typical at Each Side

1'-1"

6 - #4 d(E) Bars @ 12" Cts.
Typical at Each Side

ABUTMENT
EITHER STRUCTURE



8 - #6 a1(E) Bars @ 9" Cts.
Top & Bottom

3 - #6 h1(E) Bars (As Shown in
Section thru Backwall)

1'-0"

Back of Abutment (WB Str.)
Back of Abutment (EB Str.)

8 - #6 a(E) Bars @ 9" Cts.
Top & Bottom

3 - #6 h(E) Bars (As Shown in
Section thru Backwall)

5 - #6 a2(E) Bars @ 15" Cts.
Typical at Each Side

5 - #5 d1(E) Bars @ 12" Cts.
Typical at Each Side

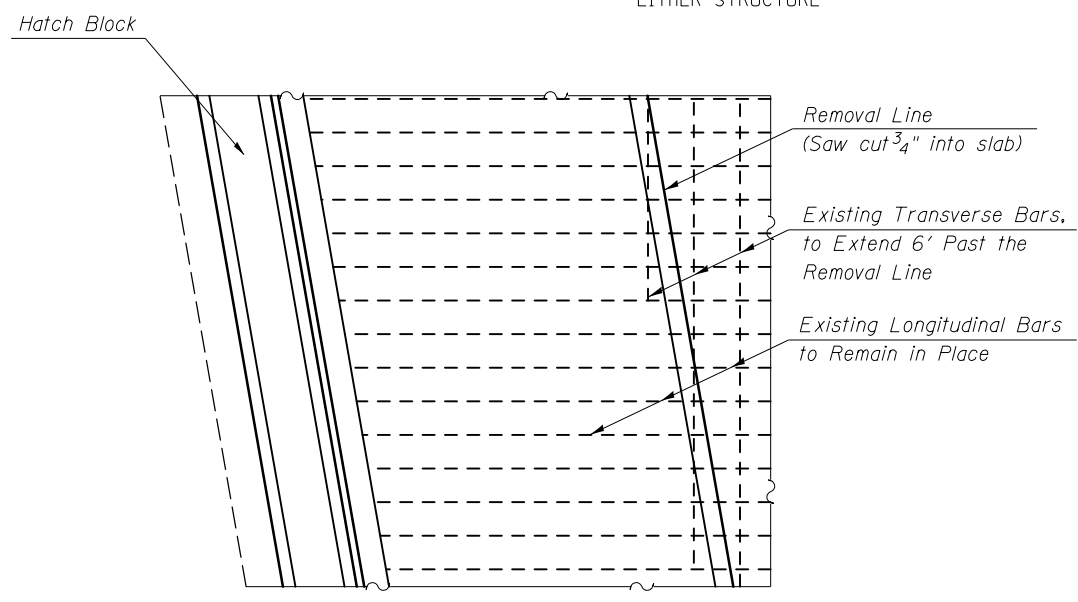
1'-0"

5'-5 1/8"

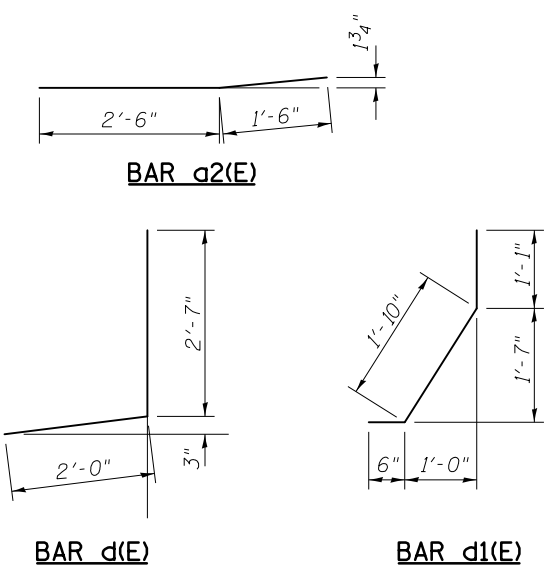
6 - #4 d(E) Bars @ 12" Cts.
Typical at Each Side

ABUTMENT
EITHER STRUCTURE

PLAN VIEW
EITHER STRUCTURE



REINFORCEMENT BAR DETAIL



BAR d(E)

BAR d1(E)

BILL OF MATERIALS

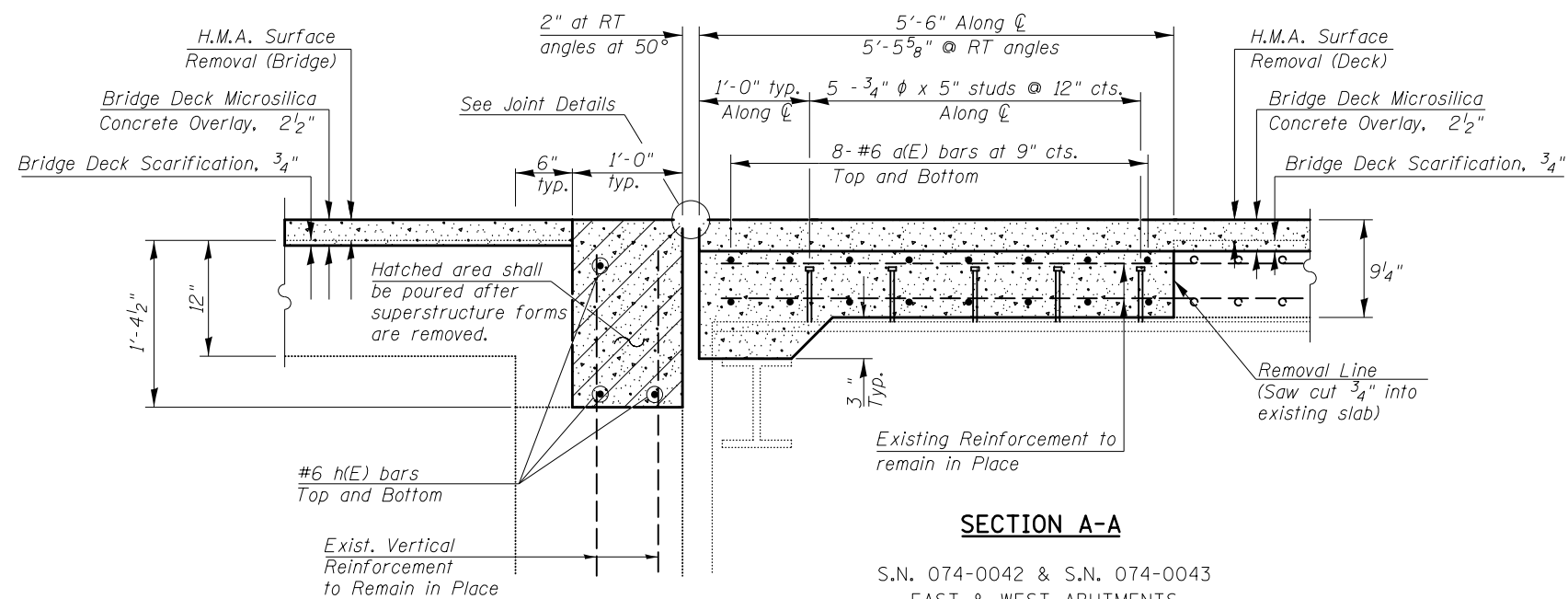
BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	64	#6	18'-11"	—
a1(E)	64	#6	20'-11"	—
a2(E)	40	#6	4'-0"	—
d(E)	48	#4	4'-7"	┌
d1(E)	40	#5	3'-5"	┌
h(E)	24	#6	18'-11"	—
h1(E)	24	#6	20'-11"	—
REINFORCEMENT BARS (EPOXY COATED)			POUND	5080.0
CONCRETE SUPERSTRUCTURE			CU YD	36.2
BAR SPLICERS			EACH	76.0
PROTECTIVE COAT			SQ YD	131.4

SEE SECTION DETAILS NEXT SHEET.

NOTES

Existing Reinforcement Bars Extending into the Removal area Shall be Cleaned, Straightened and Incorporated into the new Construction. Any Reinforcement Bars that are Damaged during Concrete Removal shall be Replaced with an Approved Bar Splicer or Anchorage System. Cost included with Concrete Removal.

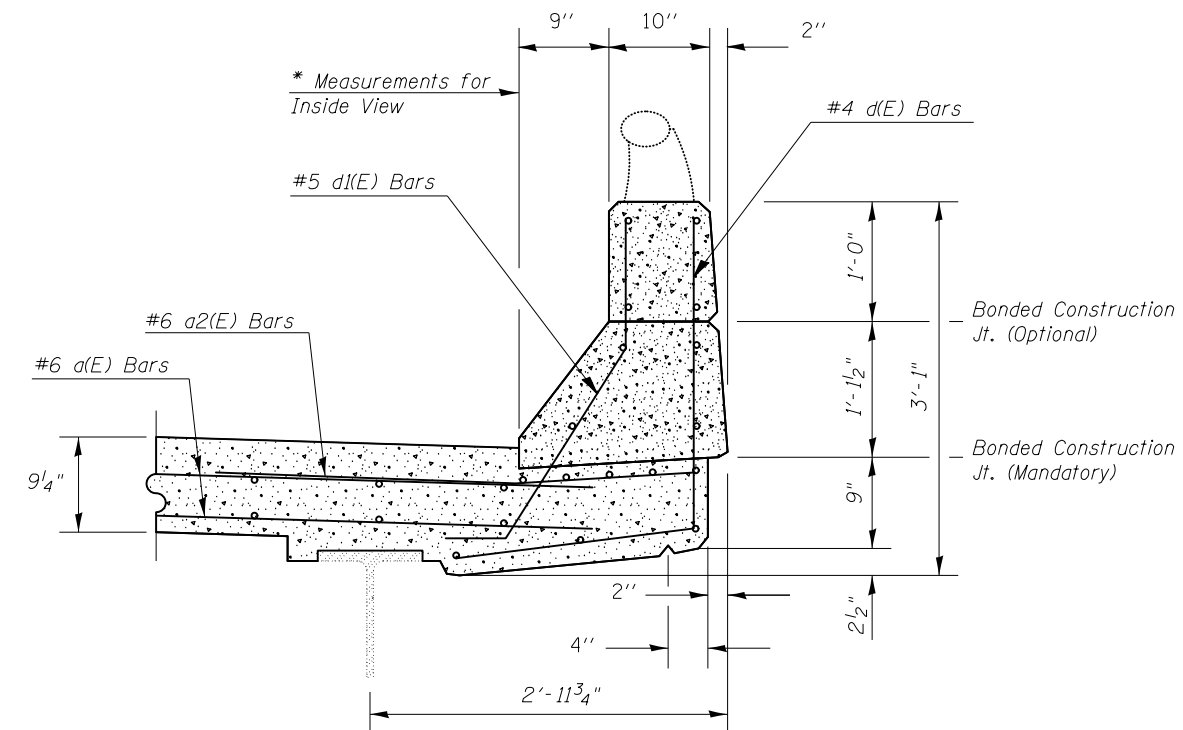
Reinforcement Bars Designated (E) shall be Epoxy Coated.



SECTION A-A

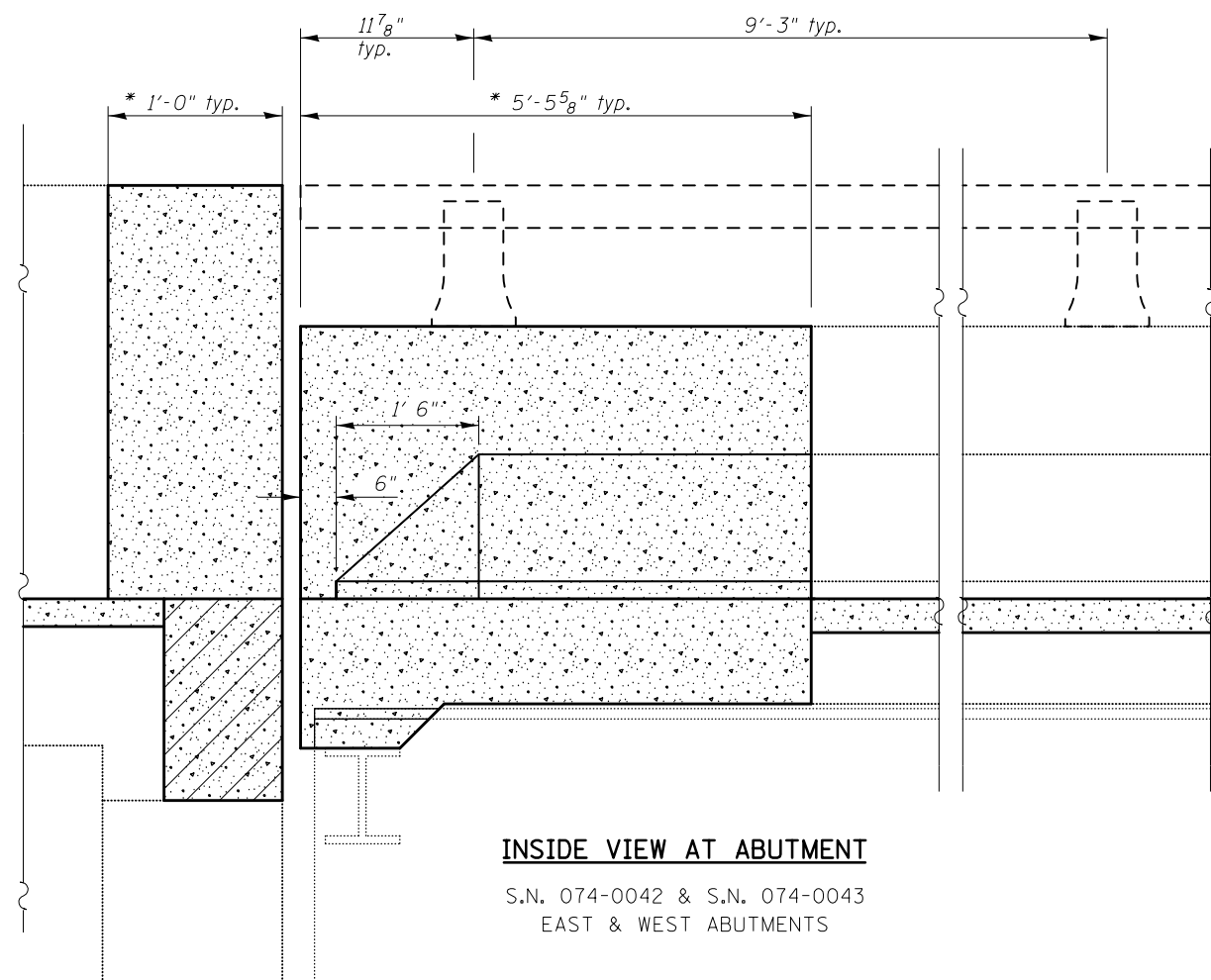
S.N. 074-0042 & S.N. 074-0043
EAST & WEST ABUTMENTS

The H.M.A. Surface for Structure 074-0043
has been found to contain ASBESTOS



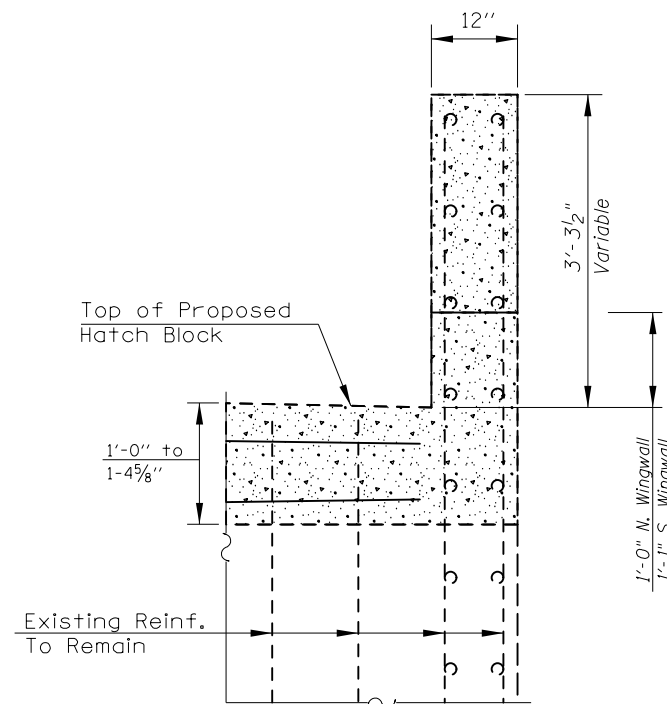
SECTION B-B

S.N. 074-0042 & S.N. 074-0043
PARAPET & DECK ENDS



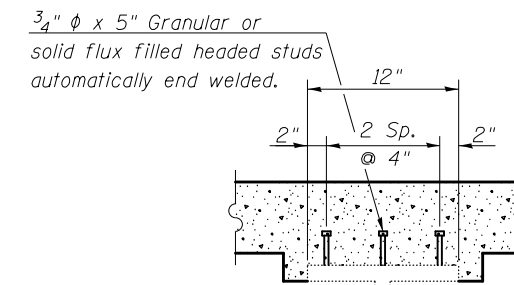
INSIDE VIEW AT ABUTMENT

S.N. 074-0042 & S.N. 074-0043
EAST & WEST ABUTMENTS



SECTION C-C

Showing Concrete Removal Limits
at Hatch Blocks and Wings



SECTION AT BEAM END

(ALL BEAMS 36WF135)

NOTES:

All existing deck transverse reinforcement (a, a1, a2) bars to be cut off 6' inside the removal line.

Existing deck "Tie Downs" in place at several beam lines on each structure. Also existing deck patching forms in place on S.N. 074-0042. Cost of removal included with concrete removal.

The guardrail attached to the end of the parapets shall be unbolted to allow for the removal and replacement of the parapet ends. The existing anchor bolts are 3'-6" in length with only 4" +/- exposed. Care shall be taken to protect the existing anchor bolts during concrete removal so that they may be reused. If the anchor bolts are damaged or determined unusable by the Engineer, they shall be replaced at the contractor's expense. Following completion of the parapet ends, the guardrail shall be re-attached. The cost of this work shall be included in Concrete Removal & Concrete Superstructures.

Existing Longitudinal Reinforcement in the deck and parapets and vertical reinforcement in the hatch blocks shall be reused.

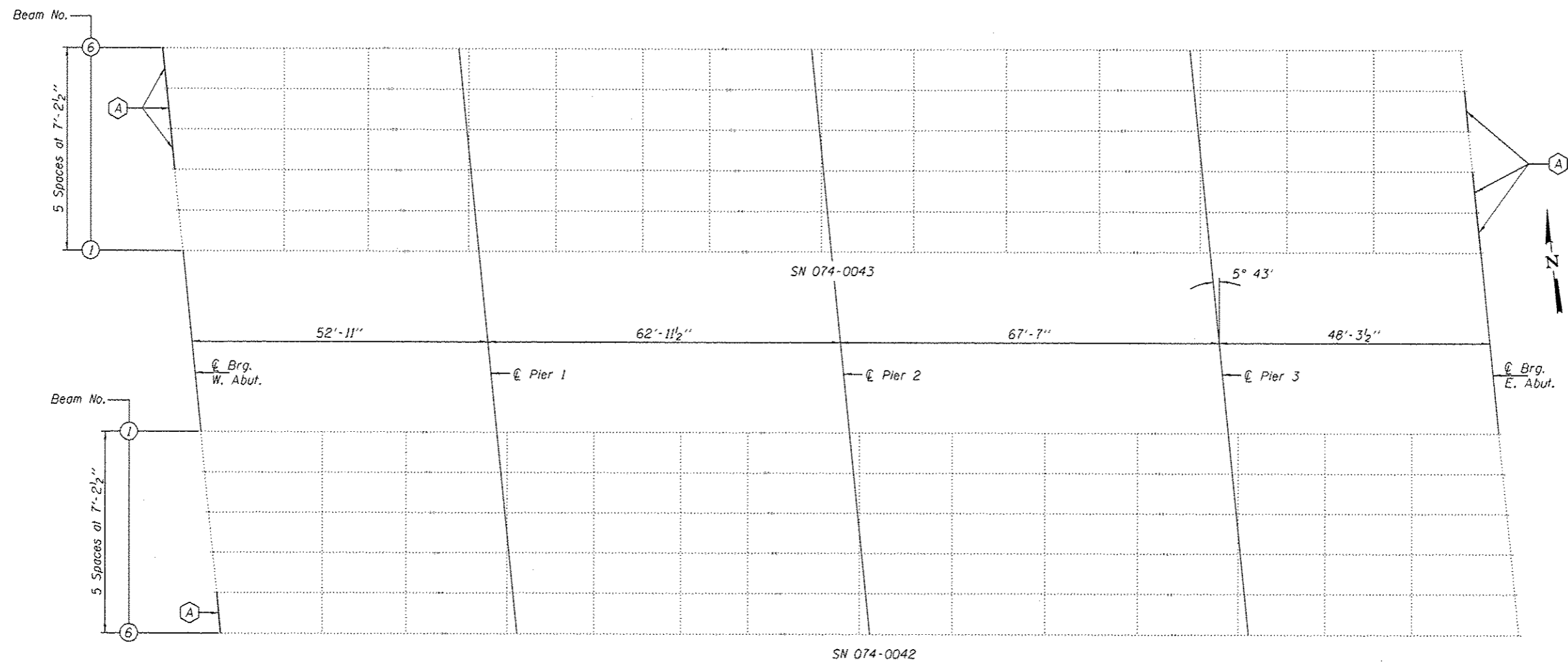
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c:\pwwork\pwwork\eam\inga\d0200193\0574717 Structure Repair Plans.sht.dgn		DRAWN - ESS	REVISED -
		CHECKED - TJB	REVISED -
		DATE - 2-7-2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED JOINT DETAILS
S.N. 074-0042 (EB) & S.N. 074-0043 (WB)**

SCALE: SHEET 8 OF 28 SHEETS STA. TO STA.

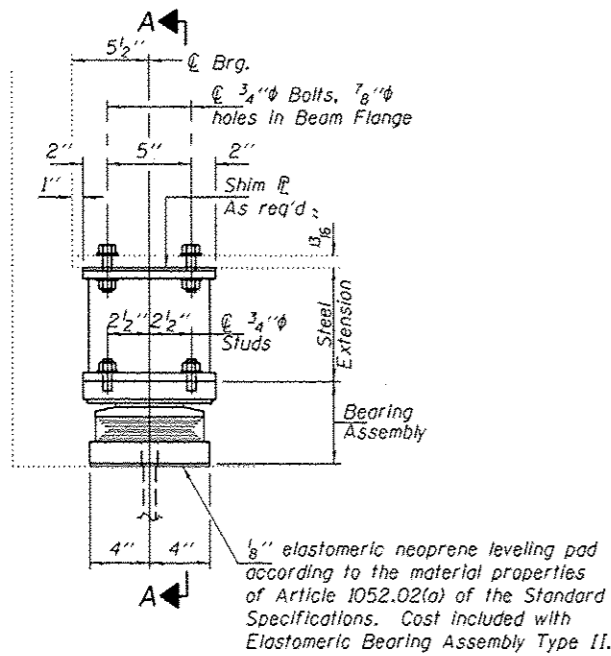
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	129
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				



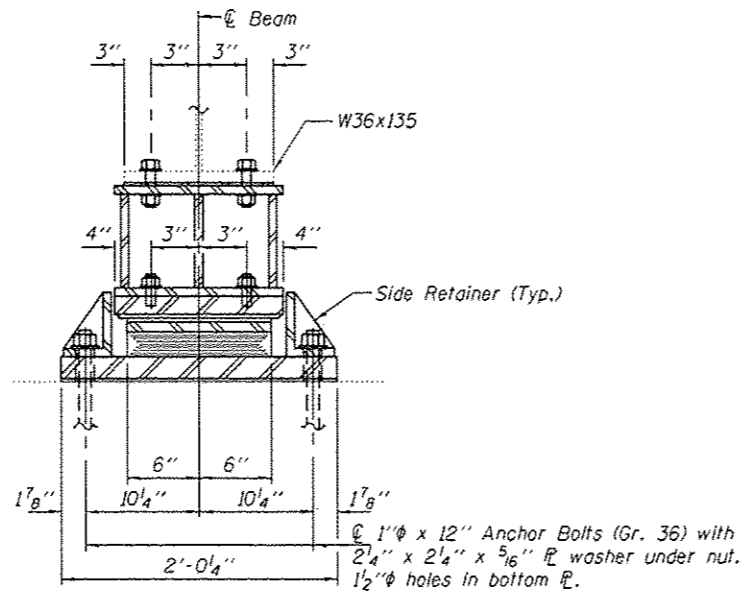
DIAPHRAGM REPLACEMENT LOCATION SKETCH

(A) - Replace diaphragm and clip angle

DESIGNED <i>SMR</i>	EXAMINED <i>Timothy A. A. [Signature]</i>	DATE <i>DECEMBER 3, 2014</i>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DIAPHRAGM REPLACEMENT LOCATION SKETCH SN 074-0042 & 0043	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED <i>DAB</i>	PASSED <i>[Signature]</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES			74	174-21RS-2 & 174-31RS-3	PIATT	310	130
DRAWN <i>baliva</i>				SHEET NO. 9 OF 28 SHEETS		CONTRACT NO. 70717			
CHECKED <i>SMR DAB</i>				ILLINOIS FED. AID PROJECT					



ELEVATION AT ABUTMENT



SECTION A-A

TYPE II TFE ELASTOMERIC EXP. BRG.

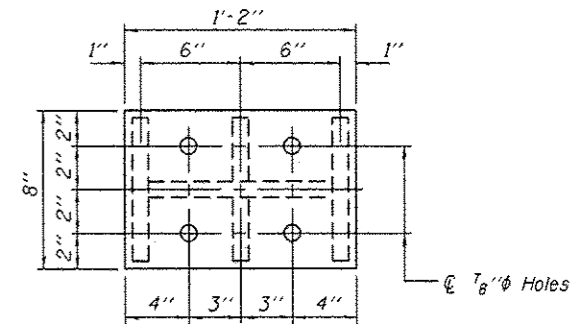
BEAM REACTIONS - W. ABUT.

RP (K)	23.7
RL (K)	37.3
Imp. (K)	10.5
R (Total) (K)	71.5

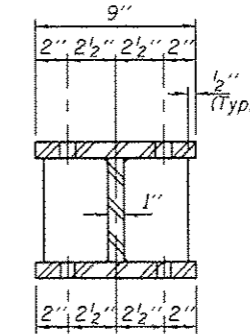
BEAM REACTIONS - E. ABUT.

RP (K)	19.8
RL (K)	36.3
Imp. (K)	10.4
R (Total) (K)	66.5

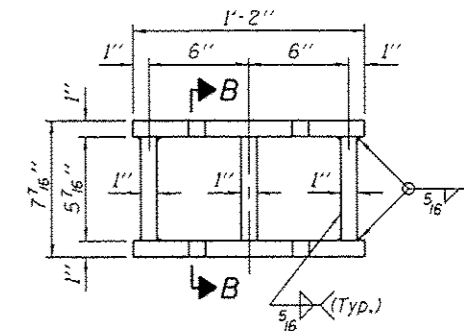
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 40 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
 Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



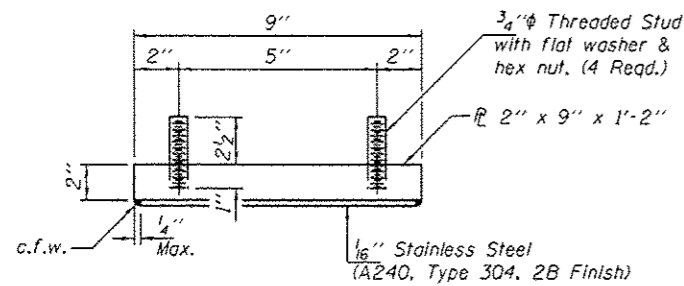
PLAN TOP AND BOTTOM PLATE



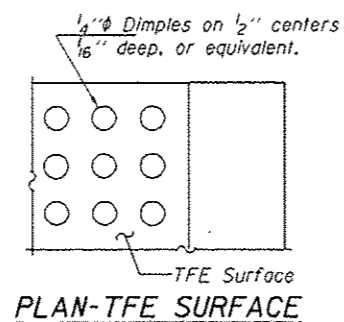
SECTION B-B



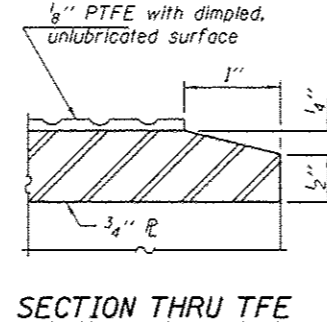
STEEL EXTENSION DETAIL



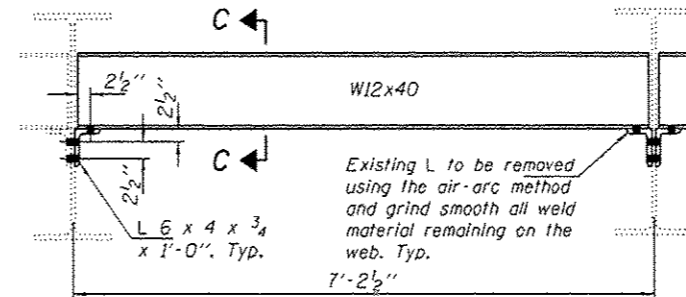
TOP BEARING ASSEMBLY (Looking North)



PLAN-TFE SURFACE

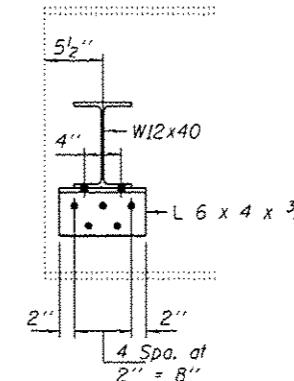


SECTION THRU TFE



DIAPHRAGM REPLACEMENT DETAIL

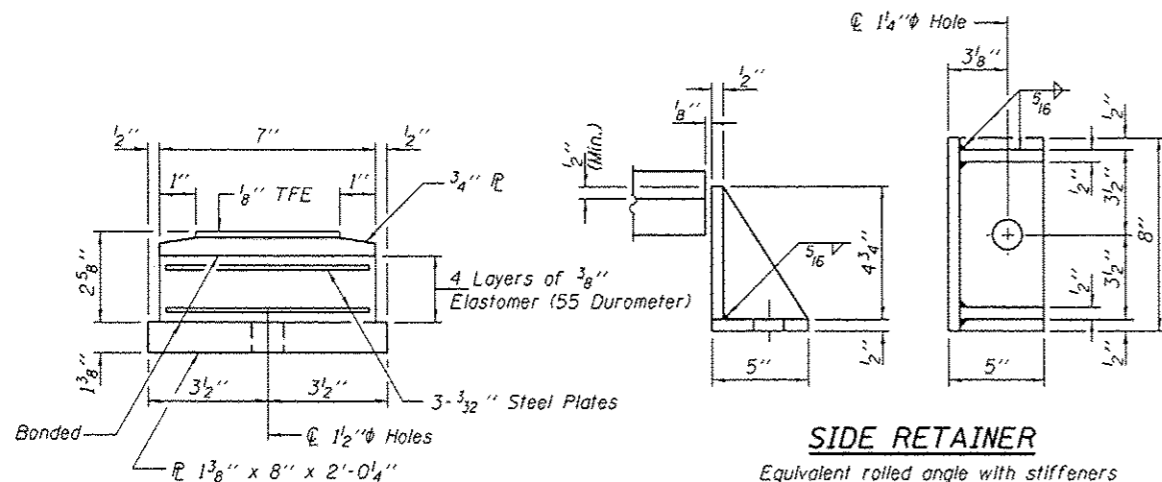
(7 Required. See Location Sketch on sheet of)
 Fasteners shall be high strength bolts. Bolts 3/4" φ, open holes 13/16" φ, unless otherwise noted.



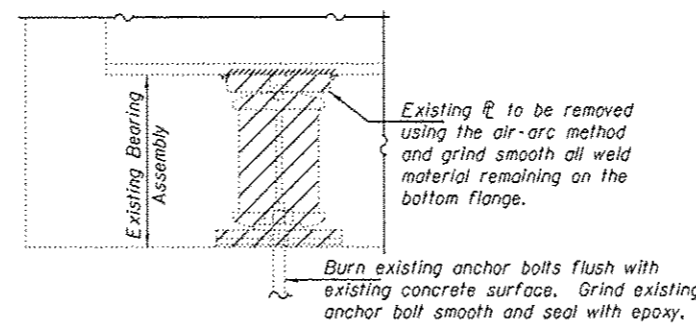
SECTION C-C

BILL OF MATERIAL (074-0042)

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	1780
Structural Steel Removal	Pound	340
Anchor Bolts 1" φ	Each	24

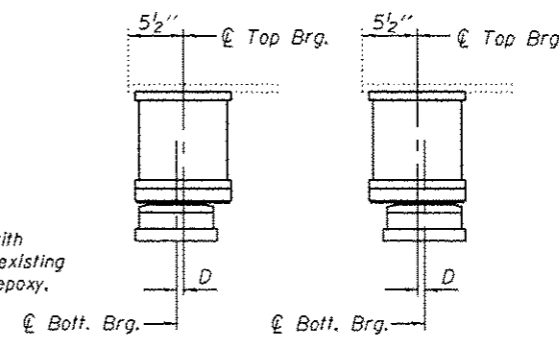


BOTTOM BEARING ASSEMBLY



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



BELOW 50° F. (Move bott. brg. away from fixed brg.)
 ABOVE 50° F. (Move bott. brg. toward fixed brg.)
SETTING ANCHOR BOLTS AT EXP. BRG.
 D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL (074-0043)

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	3720
Structural Steel Removal	Pound	2030
Anchor Bolts 1" φ	Each	24

TYII/REPS 12-03-2008

DESIGNED SMR
 CHECKED DAB
 DRAWN baliva
 CHECKED SMR DAB

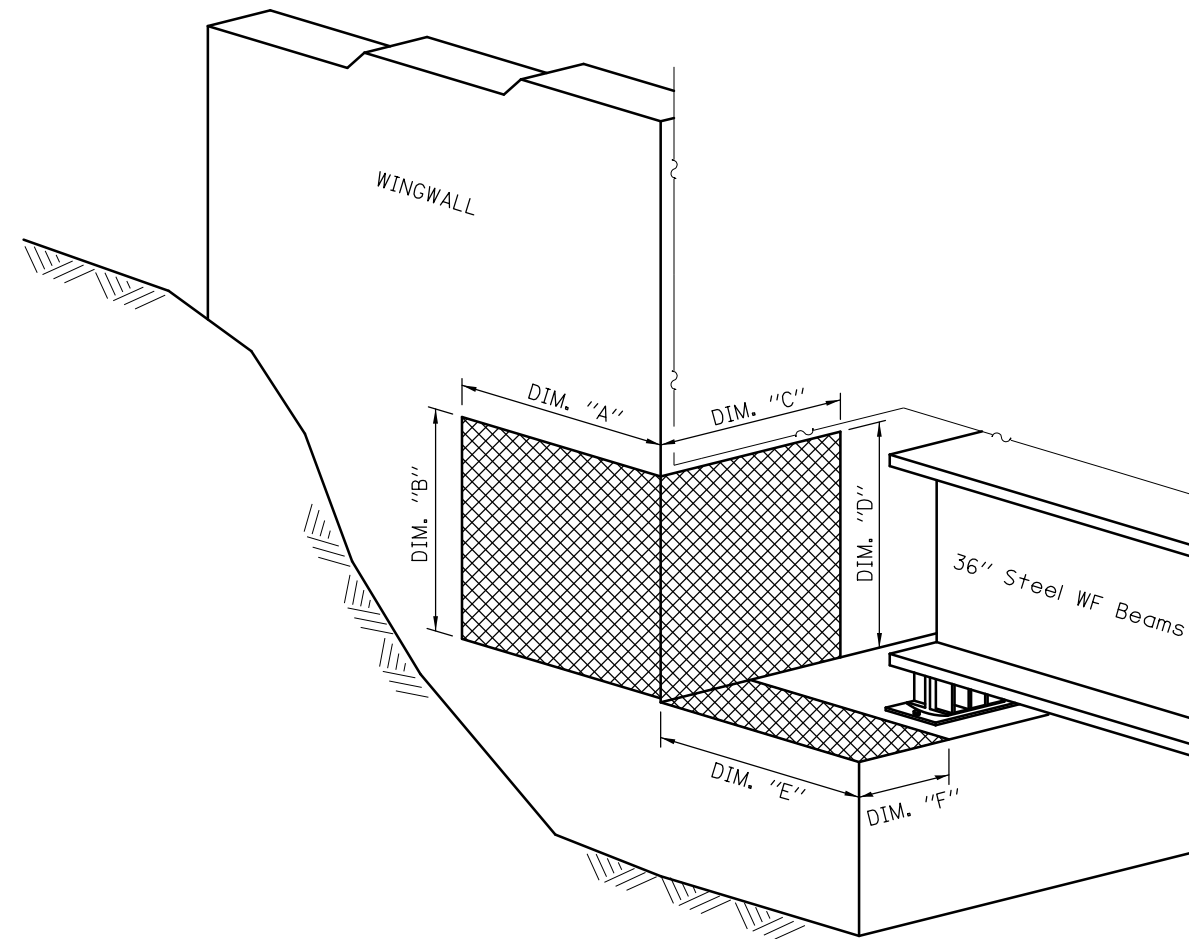
EXAMINED
 PASSED
 DATE - DECEMBER 3, 2014
 ACTING ENGINEER OF STRUCTURAL SERVICES
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ABUTMENT BEARING REPLACEMENT DETAILS
 SN 074-0042 & 0043

SHEET NO. 10 OF 28 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	131
				CONTRACT NO. 70717
[ILLINOIS] FED. AID PROJECT				



ISOMETRIC VIEW AT ABUTMENT CORNER

STRUCTURE REPAIR OF CONCRETE, DEPTH EQUAL TO OR LESS THAN 5"								
STRUCTURE	ABUTMENT CORNER	WINGWALL		CORNER		ABUTMENT CAP		AREA (SQ FT)
		A	B	C	D	E	F	
074-0042		1.00	4.00	1.00	4.00			8.00
		2.00	4.00	2.30	4.00			17.20
		1.50	4.50	2.0	4.50			15.75
		1.50	4.50	2.50	4.50			18.00
TOTAL =								59.0
074-0043	NW	2.00	4.50	1.00	4.50			13.50
	SW	3.00	4.50	2.00	4.50			22.50
	NE	2.00	4.50	2.00	4.50			18.00
	SE	2.50	4.50	2.00	4.50	2.80	2.00	23.60
TOTAL =								77.6
GRAND TOTAL =								136.6

LEGEND

Structural Repair of Concrete, Depth Equal to or Less Than 5"

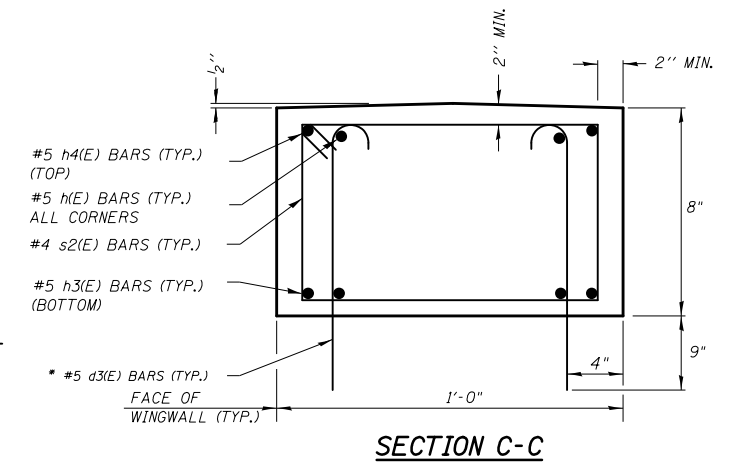
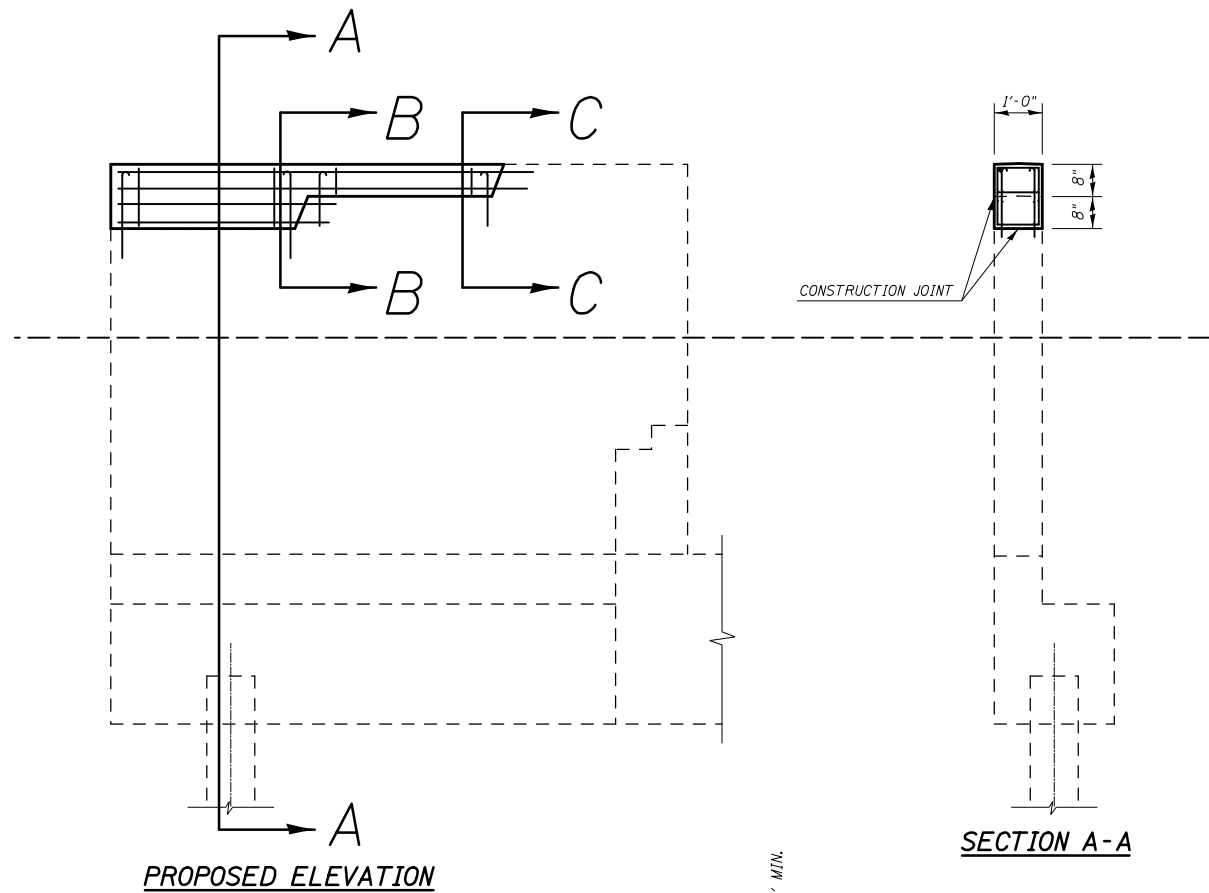
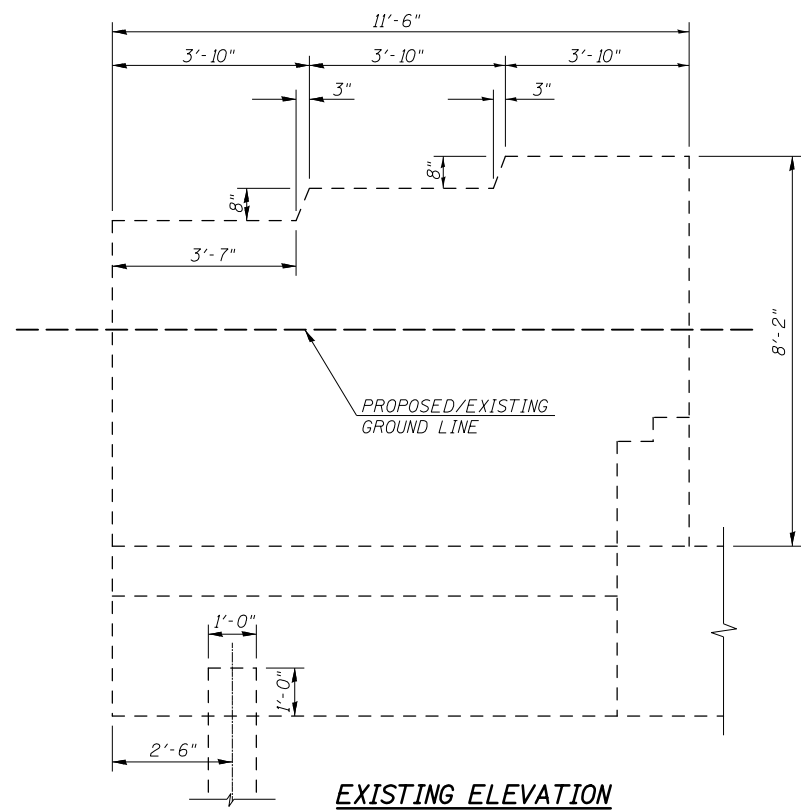
Note:

See Special Provision for Structural Repair of Concrete.

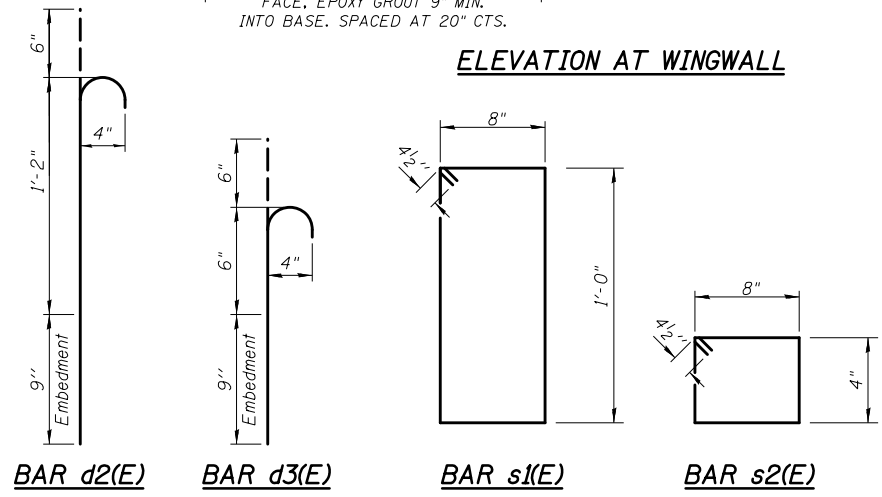
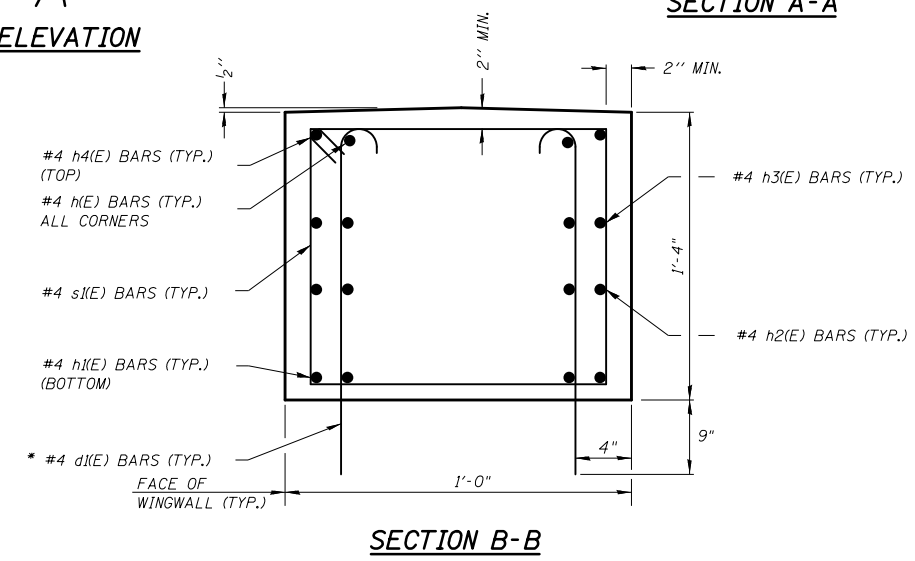
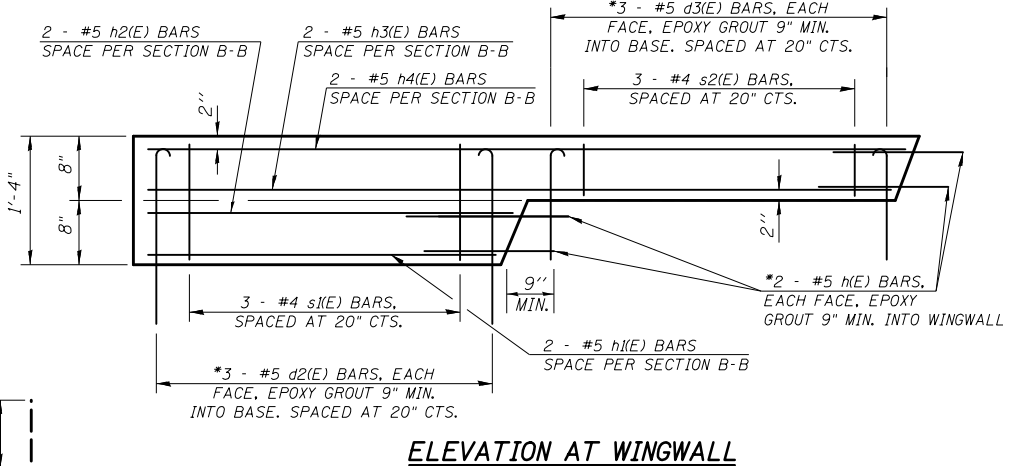
BILL OF MATERIAL

Includes totals from Pier Repair and Substructure Repair Quantities.

STRUCTURE	ITEM	UNIT	TOTAL
074-0042	STRUCTURE REPAIR OF CONCRETE, DEPTH EQUAL TO OF LESS THAN 5"	SQ FT	59.0
074-0043	STRUCTURE REPAIR OF CONCRETE, DEPTH EQUAL TO OF LESS THAN 5"	SQ FT	77.6
	PROTECTIVE COAT	SQ FT	15.2



* EPOXY GROUT BARS IN 9" MIN. HOLES ACCORDING TO ARTICLE 584 OF THE STANDARD SPECIFICATIONS.



GENERAL NOTES

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 BASED UPON THE UNIT PRICE BID FOR THE WORK.

THE COST OF EPOXY GROUTING BARS SHALL BE INCLUDED WITH REINFORCEMENT BARS (EPOXY COATED).

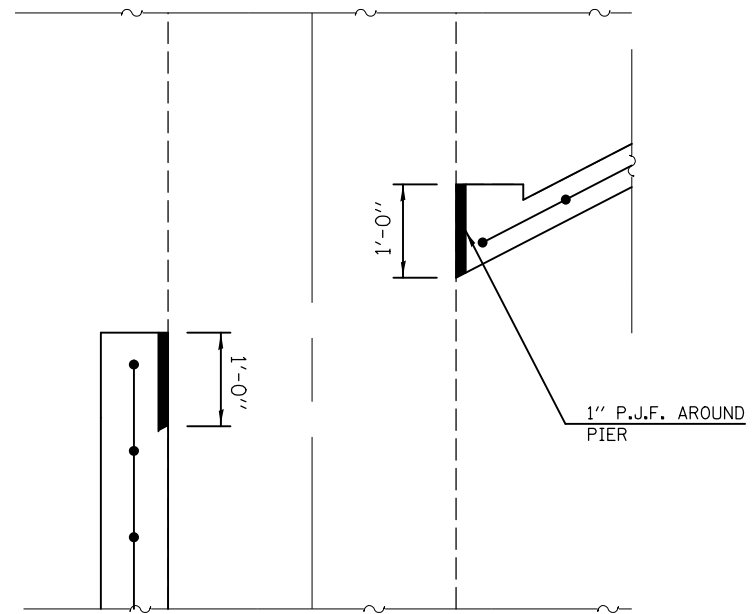
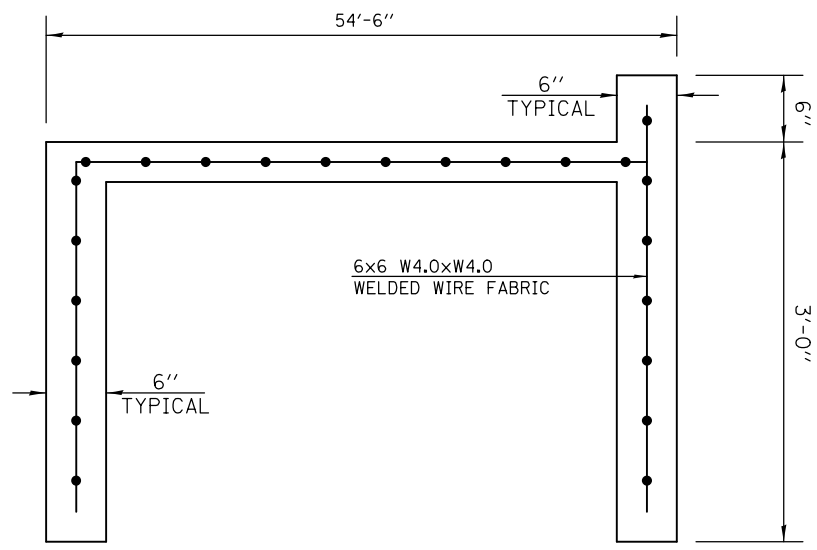
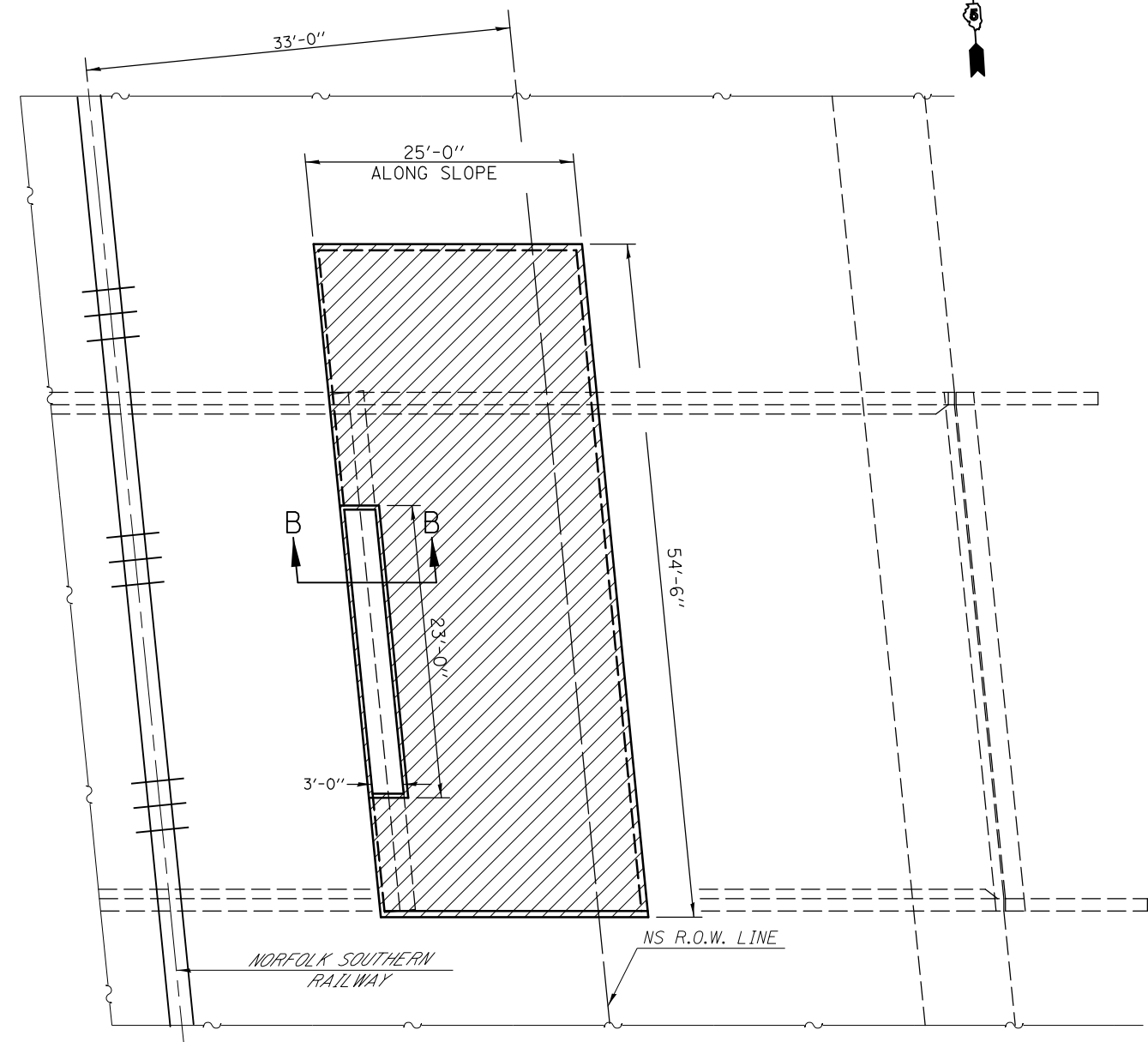
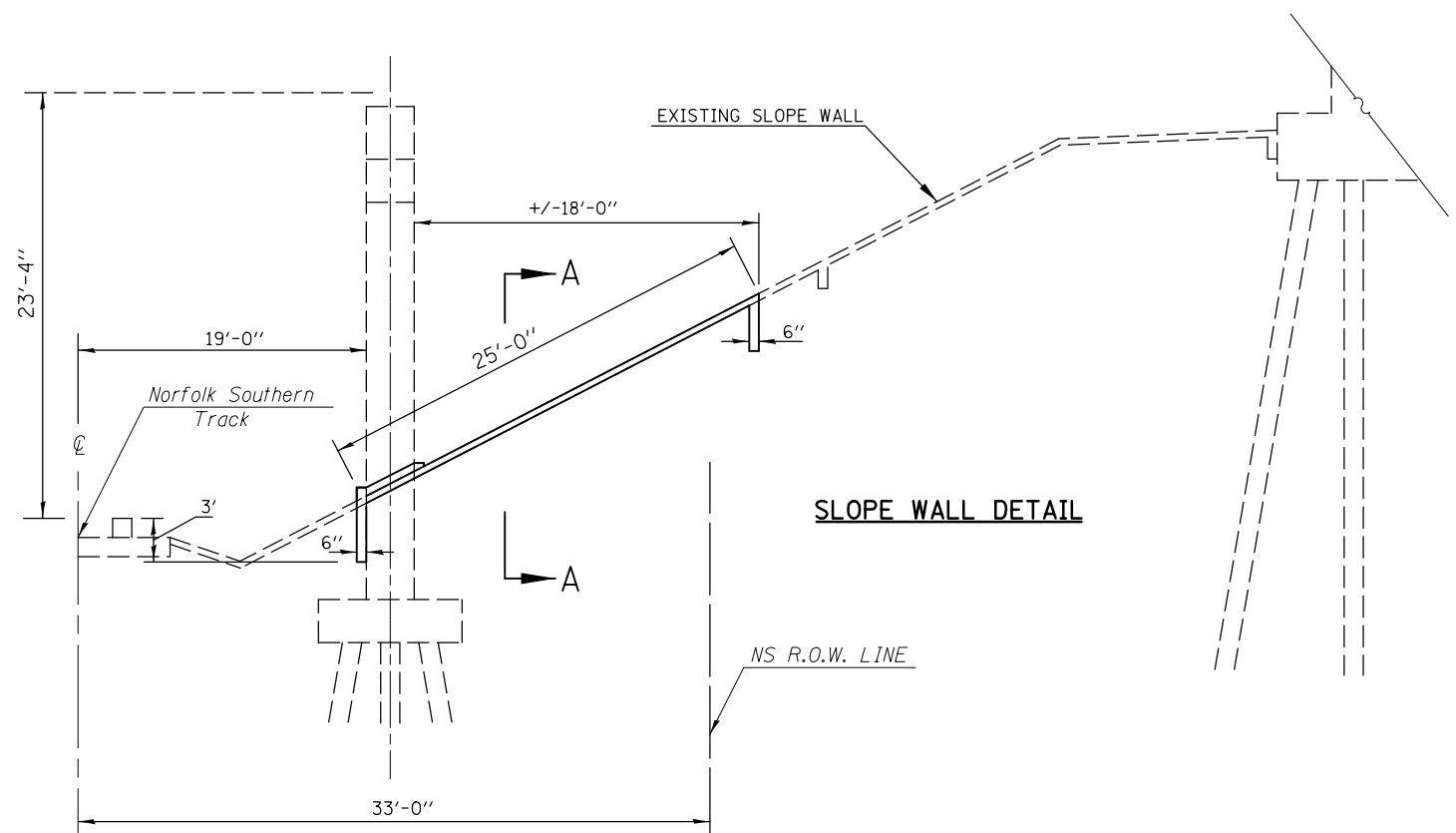
REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 OR GR 60. SEE SPECIAL PROVISIONS.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

BILL OF MATERIALS				
BAR	SHAPE	NO.	SIZE	LENGTH
d2(E)		24	#5	2'-5"
d3(E)		24	#5	1'-9"
h(E)		32	#5	2'-5"
h1(E)		8	#5	3'-4"
h2(E)		8	#5	3'-5"
h3(E)		8	#5	7'-2"
h4(E)		8	#5	7'-3"
s1(E)		12	#4	4'-1"
s2(E)		12	#4	2'-9"
CONCRETE SUPERSTRUCTURE			CU. YD.	0.6
REINFORCEMENT BARS, EPOXY COATED			LBS.	250.0
PROTECTIVE COAT			CU. YD.	5.9

BILL OF MATERIAL QUANTITIES INCLUDE TWO WINGWALLS. S.N. 074-0042 EAST ABUTMENT SOUTH WINGWALL. S.N. 074-0043 WEST ABUTMENT NORTH WINGWALL.

SLOPE WALL DETAILS S.N. 074-0042 (EB)



**PLAN VIEW - PIER #3
AND EAST ABUTMENT**

CONCRETE SLOPEWALL REMOVAL

NOTES

Prior to partial removal of any concrete structure a ³/₄" deep saw cut shall be made along all boundaries of the removal area. Saw cut will be include with the cost of slope wall removal.

The preparation of the earth bed, excavation, backfill material will be included with the cost of slope wall 6 inch.

The Concrete Drainage Ditch between the slope wall replacement and the NS Track shall be cleaned of debris. This debris shall not be cleaned out into the NS subballast. Cost included with Slope Wall Removal.

BILL OF MATERIALS

ITEM	UNIT	TOTAL
SLOPE WALL REMOVAL	SQ YD	143.8
SLOPE WALL 6 INCH	SQ YD	143.8
PROTECTIVE COAT	SQ YD	143.8

FILE NAME =	USER NAME = eaglinge	DESIGNED - ESS	REVISED - TJB
et:\pw\work\p\dot\ea\linge\d0200193\0570717 Structure Repair Plans-sht.dgn		DRAWN - ESS	REVISED - TJB
	PLOT SCALE = 40.0000' / in.	CHECKED - TJB	REVISED -
	PLOT DATE = 12/1/2014	DATE - 3-28-2013	REVISED - 11/24/2014

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

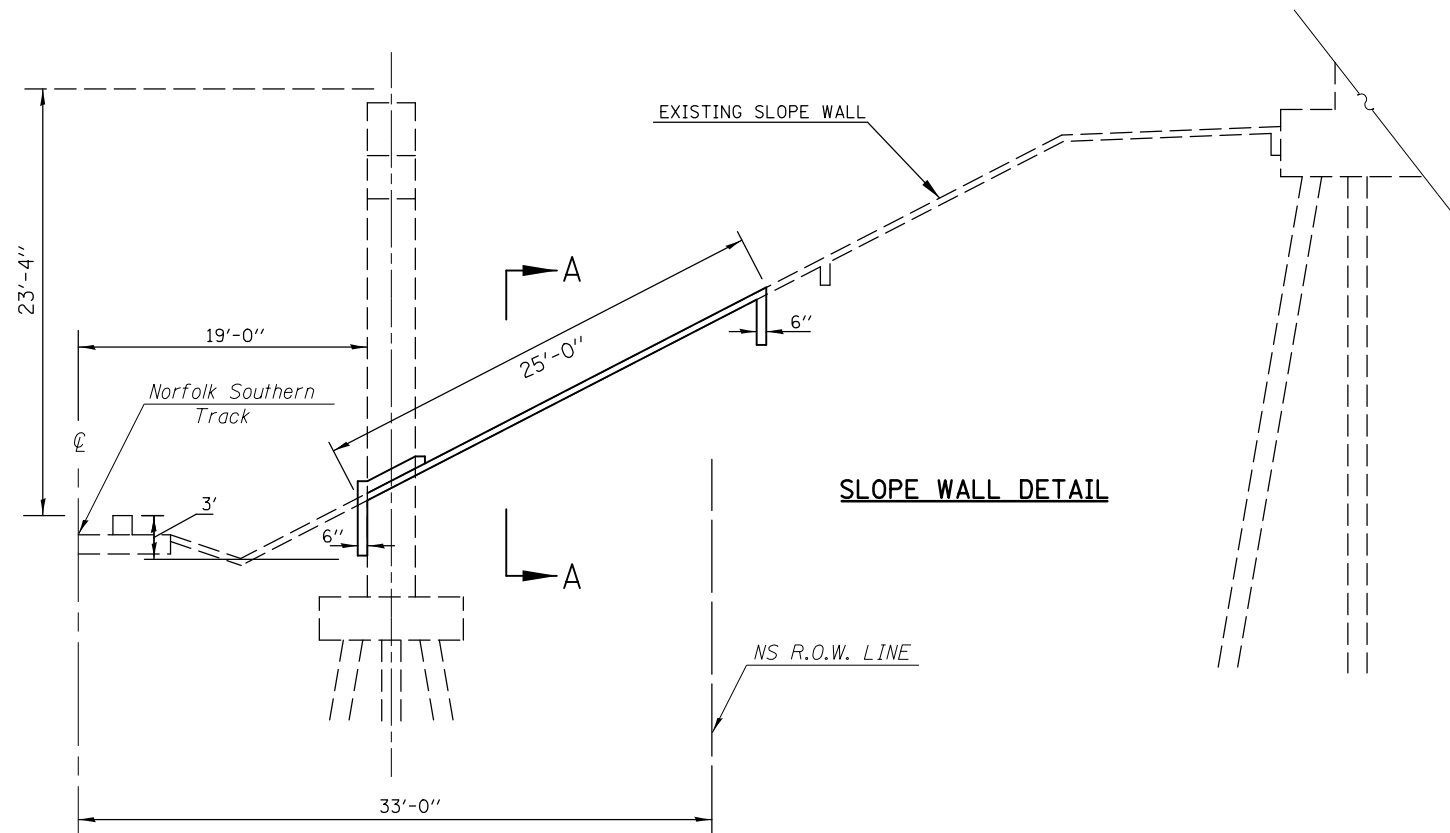
**SLOPE WALL DETAILS
S.N. 074-0042 (EB)**

SCALE: SHEET 14 OF 28 SHEETS STA. TO STA.

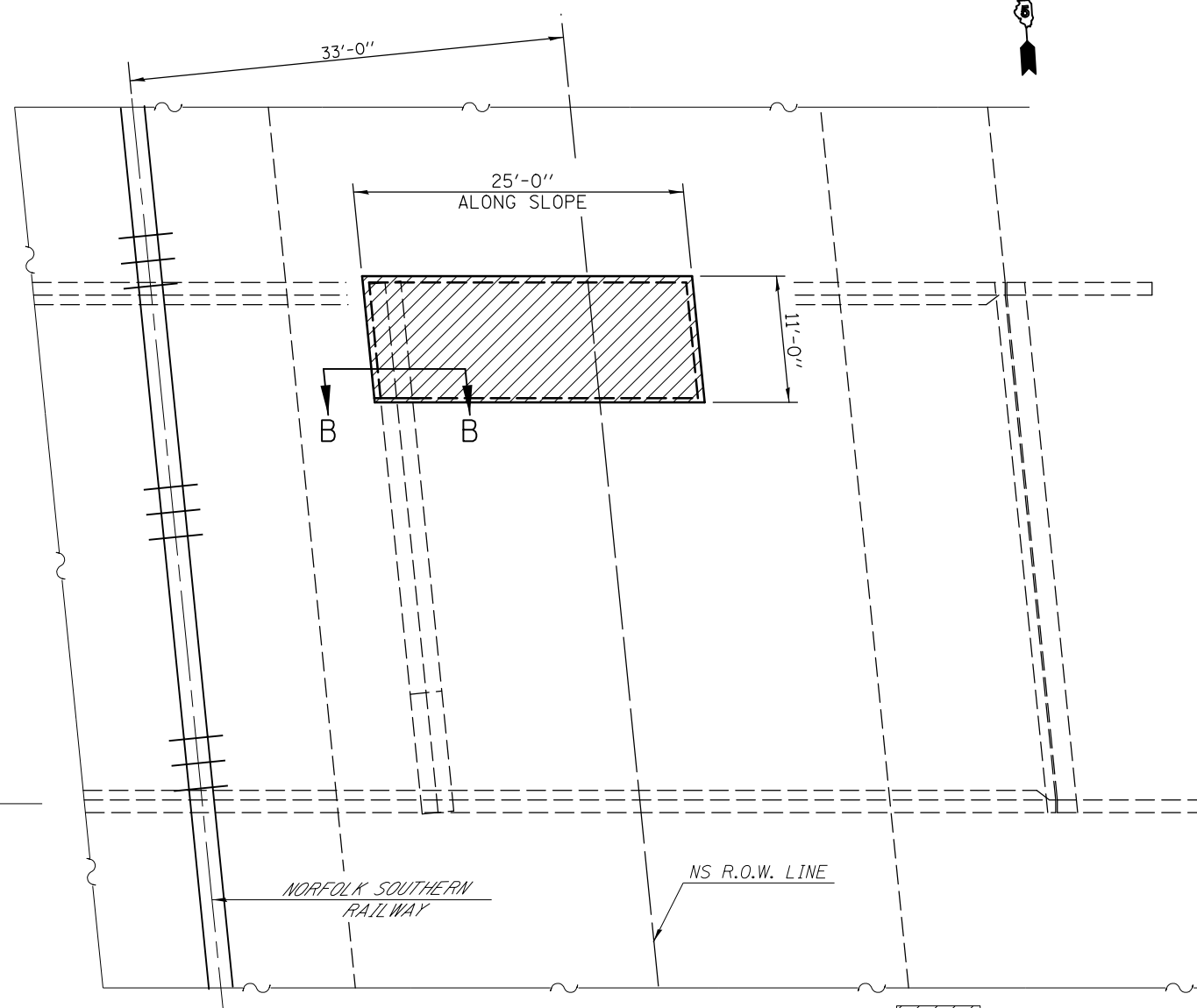
F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	135
CONTRACT NO. 70717				

ILLINOIS FED. AID PROJECT

SLOPE WALL DETAILS S.N. 074-0043 (WB)

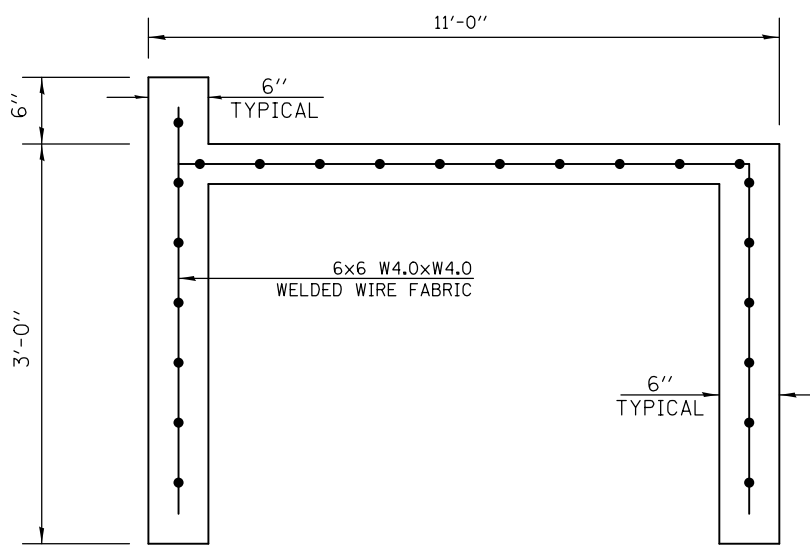


SLOPE WALL DETAIL

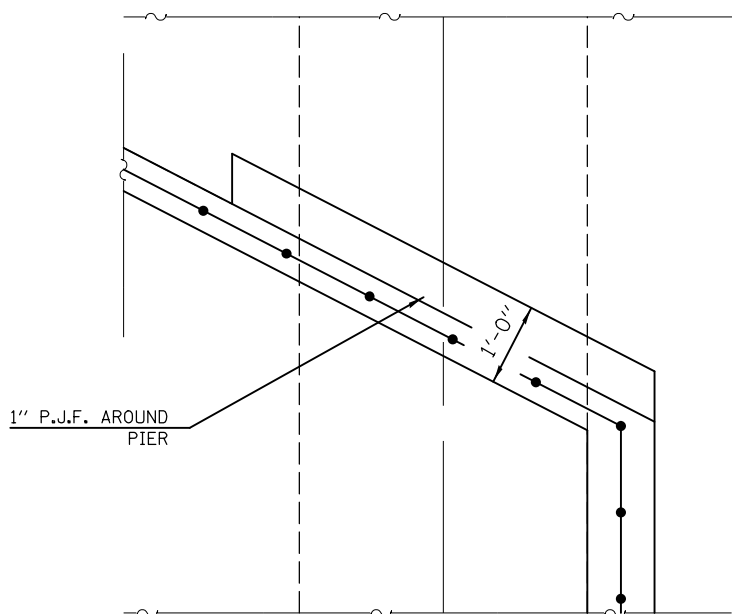


**PLAN VIEW - PIER #3
AND EAST ABUTMENT**

CONCRETE SLOPEWALL REMOVAL



SECTION A-A



SECTION B-B

BILL OF MATERIALS

ITEM	UNIT	TOTAL
SLOPE WALL REMOVAL	SQ YD	30.6
SLOPE WALL 6 INCH	SQ YD	30.6
PROTECTIVE COAT	SQ YD	30.6

NOTES

Prior to partial removal of any concrete structure a 3/4" deep saw cut shall be made along all boundaries of the removal area. Saw cut will be included with the cost of slope wall removal.

The preparation of the earth bed, excavation, backfill material will be included with the cost of slope wall 6 inch.

The Concrete Drainage Ditch between the slope wall replacement and the NS Track shall be cleaned of debris. This debris shall not be cleaned out into the NS subballast. Cost included with Slope Wall Removal.

FILE NAME =	USER NAME = eaglinge	DESIGNED - ESS	REVISED - TJB
et:\pw\work\p\midot\ea\linge\d\200193\0576717 Structure Repair Plans\sh.t.dgn		DRAWN - ESS	REVISED - TJB
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		DATE - 3-28-2013	REVISED - 11/24/2014

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

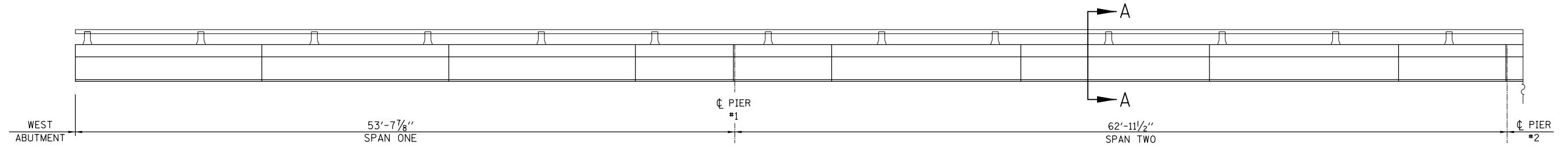
**SLOPE WALL DETAILS
S.N. 074-0043 (WB)**

SCALE: SHEET 15 OF 28 SHEETS STA. TO STA.

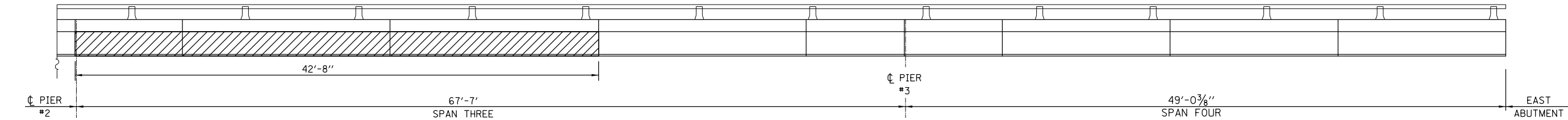
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	136
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				

PLAN FOR STRUCTURAL REPAIR OF CONCRETE ON PARAPETS

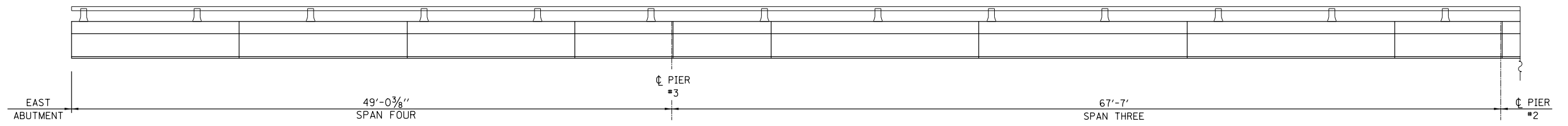
S.N. 074-0043 (WB)



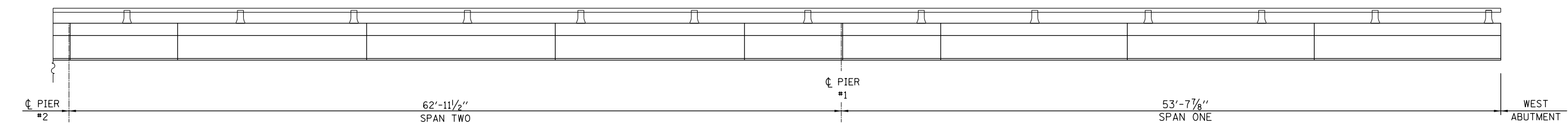
ELEVATION: WEST HALF OF NORTH PARAPET



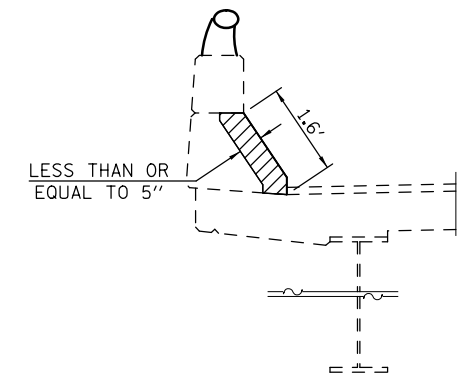
ELEVATION: EAST HALF OF NORTH PARAPET



ELEVATION: EAST HALF OF SOUTH PARAPET



ELEVATION: WEST HALF OF SOUTH PARAPET



SECTION A-A

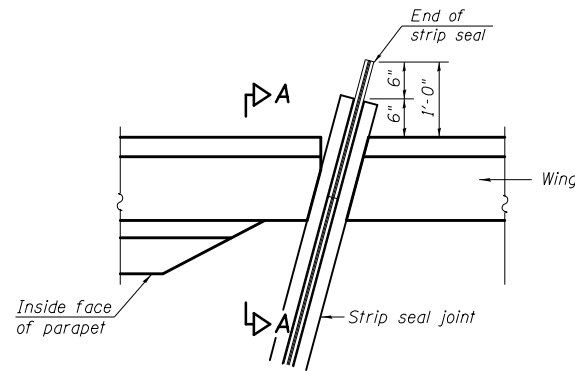
SHOWING TYPICAL REMOVAL LIMITS FOR
STRUCTURAL REPAIR OF CONCRETE ON PARAPETS

NOTE:
SEE SPECIAL PROVISION FOR STRUCTURAL REPAIR OF CONCRETE.

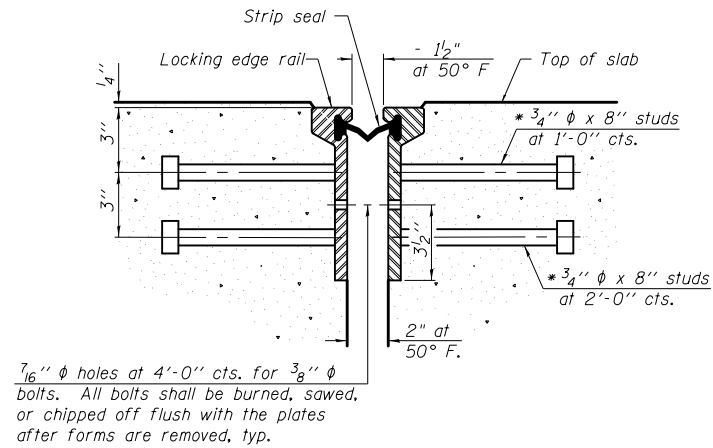
LEGEND
 STRUCTURAL REPAIR OF CONCRETE, DEPTH EQUAL TO OR LESS THAN 5"

BILL OF MATERIALS

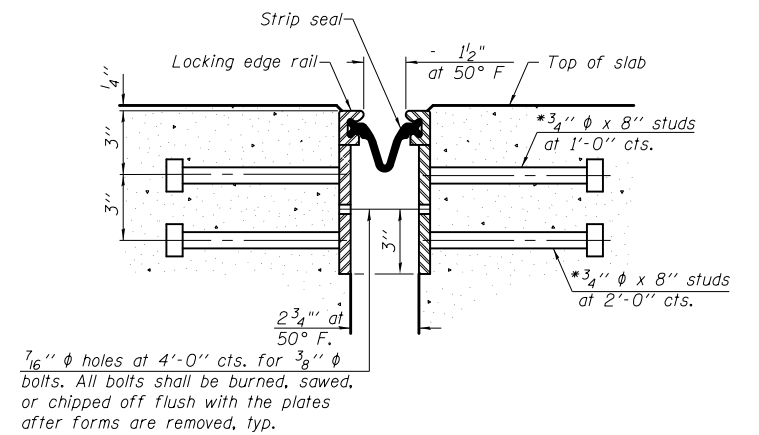
ITEM	UNIT	TOTAL
STRUCTURAL REPAIR OF CONCRETE (DEPTH LESS THAN OR EQUAL TO 5")	SQ FT	64.0
PROTECTIVE COAT	SQ YD	7.1



PLAN
(For skews $\leq 30^\circ$)

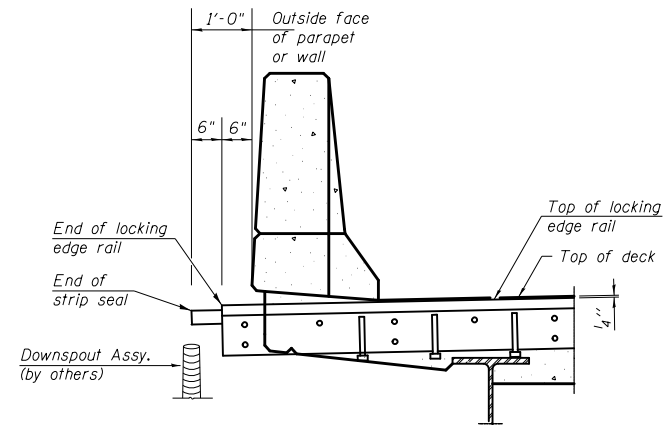


SECTION THRU ROLLED RAIL JOINT

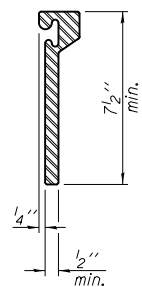


SECTION THRU WELDED RAIL JOINT

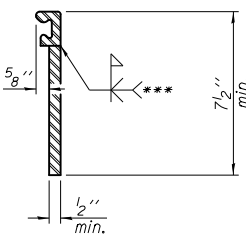
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



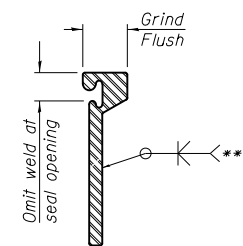
SECTION A-A
At Curb, Parapet or Wall



ROLLED EXTRUDED RAIL



WELDED RAIL



*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.
Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
The manufacturer's recommended installation methods shall be followed.
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.
Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	177.0

FILE NAME =	USER NAME = eaglinge	DESIGNED - RTC	REVISED ESS
c:\pwwork\pwwork\eam\inga\d0200193\0570	717 Structure Repair Plans.sht.dgn	DRAWN - RTC	REVISED ESS
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PLOT DATE = 10/16/2014	DATE - 5/18/2012	REVISIED -	

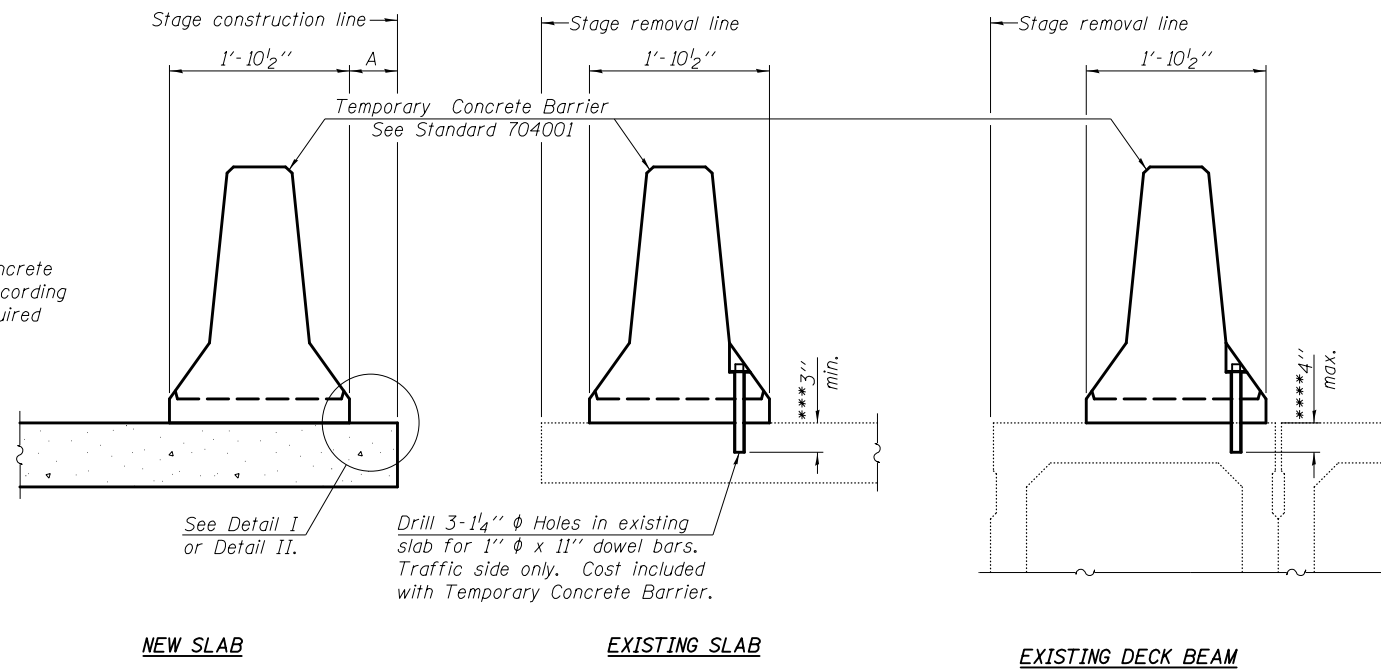
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL DETAILS
S.N. 074-0042 (EB) & S.N. 074-0043 (WB)

SCALE: SHEET 19 OF 28 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	140
			CONTRACT NO. 70717	
ILLINOIS FED. AID PROJECT				

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

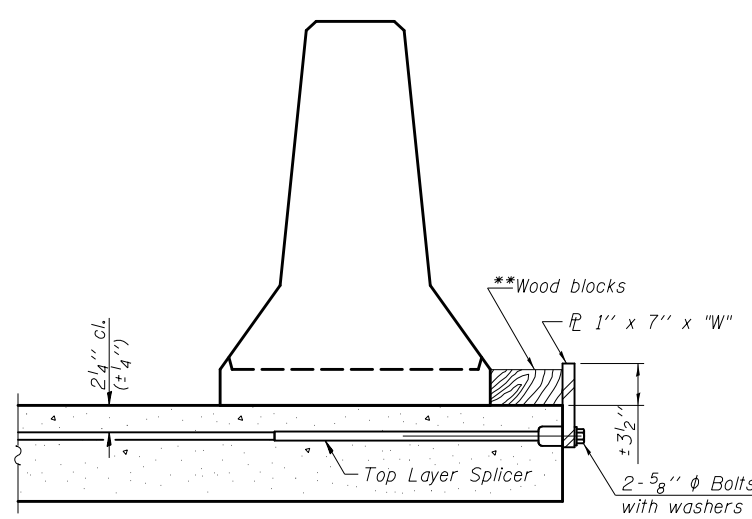
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

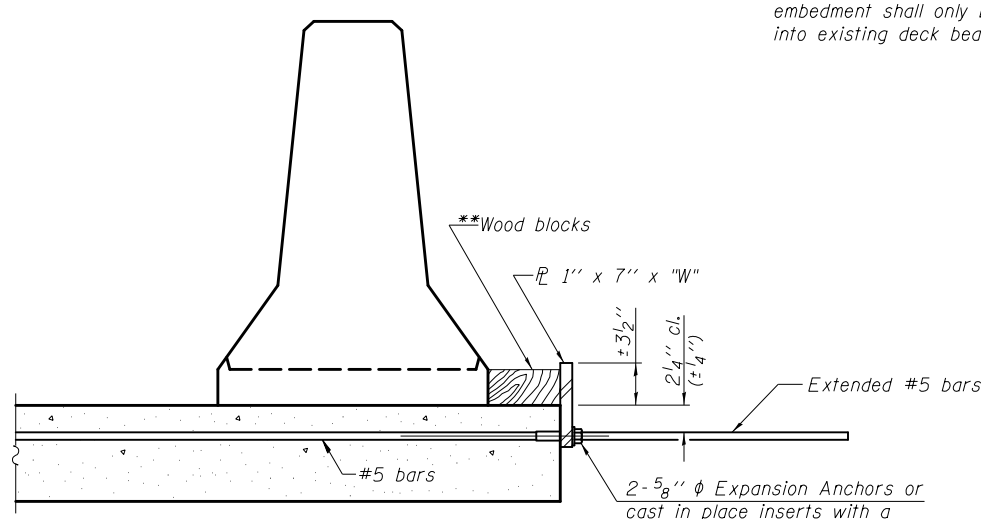
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

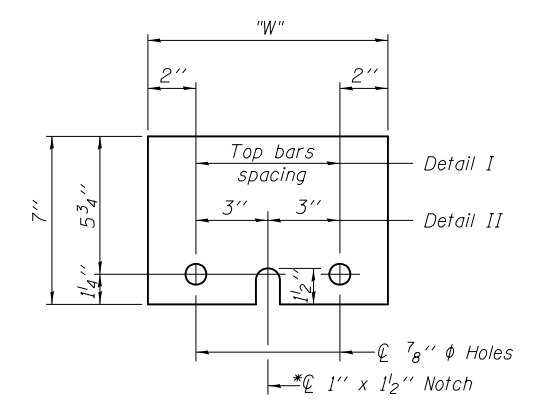
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER PL 1" x 7" x "W"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

R-27

7-1-10

FILE NAME =	USER NAME = eaglinge	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION S.N. 074-0042 (EB) & S.N. 074-0043 (WB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pwork\pwork\eidoteaglinge\d0200193\0570717 Structure Repair Plans.sht.dgn	DRAWN -	REVISED -	74			(74-2)RS-2 & (74-3)RS-3	PIATT	310	142		
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 70717								
PLOT DATE = 10/16/2014	DATE -	REVISED -	ILLINOIS FED. AID PROJECT								
					SCALE:	SHEET 21 OF 28 SHEETS	STA.	TO STA.			

AS-BUILT PLANS FOR INFORMATION ONLY

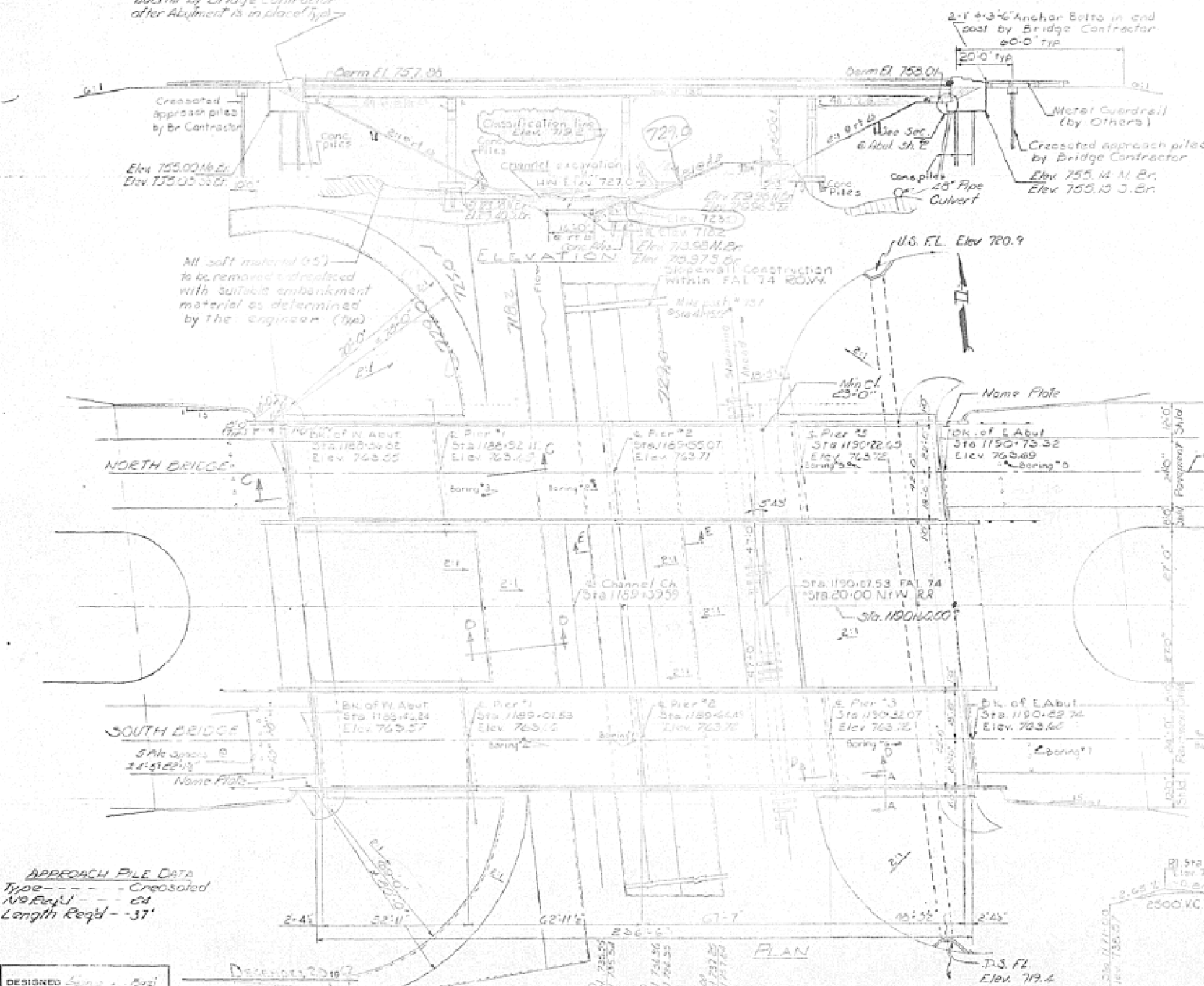
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74-2RS-2	74-3RS-3	PIATT	50	12
SHEET NO. 1 10 SHEETS				

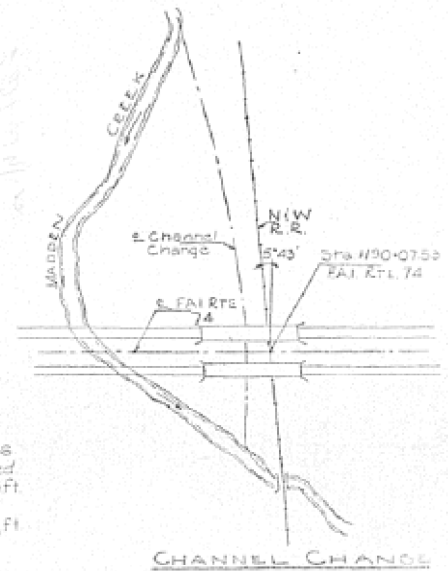
B.M. *105 Horiz. RR Spike in Double
Pile West Side of Norfolk Western
R.R. Elev. 725.56

This portion of Embankment
backfill by Bridge Contractor
after Abutment is in place (typ)

NOTE:
See Sheet No. 6 for General
Notes, Total Bill of Materials,
Sections and Name Plate.



WATERWAY INFORMATION
Drainage Area: 2900 acres
Character: level, clay, cultivated
Required Opening: 180 sq ft
Present Opening: None
Proposed Opening: 297 sq ft



DESIGN STRESSES
Rc: 1400 psi (Super + Sub)
Fs: 20,000 psi (Reinf)
Fb: 20,000 psi (Struct)
Fv: 75 psi (Figs)
n: 10
% Deflection: 100%



APPROACH PILE DATA
Type: --- Created
No. Piles: --- 24
Length Req'd: --- 37'

DESIGNED	Examined
CHECKED	JS
DRAWN	D. Williams Jr.
CHECKED	D. Williams Jr.

DESIGNED	Examined
CHECKED	JS
DRAWN	D. Williams Jr.
CHECKED	D. Williams Jr.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS BUILT PLANS
S.N. 074-0042 (EB) & S.N. 074-0043 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	143
CONTRACT NO. 70717				

SCALE: SHEET 22 OF 28 SHEETS STA. TO STA.

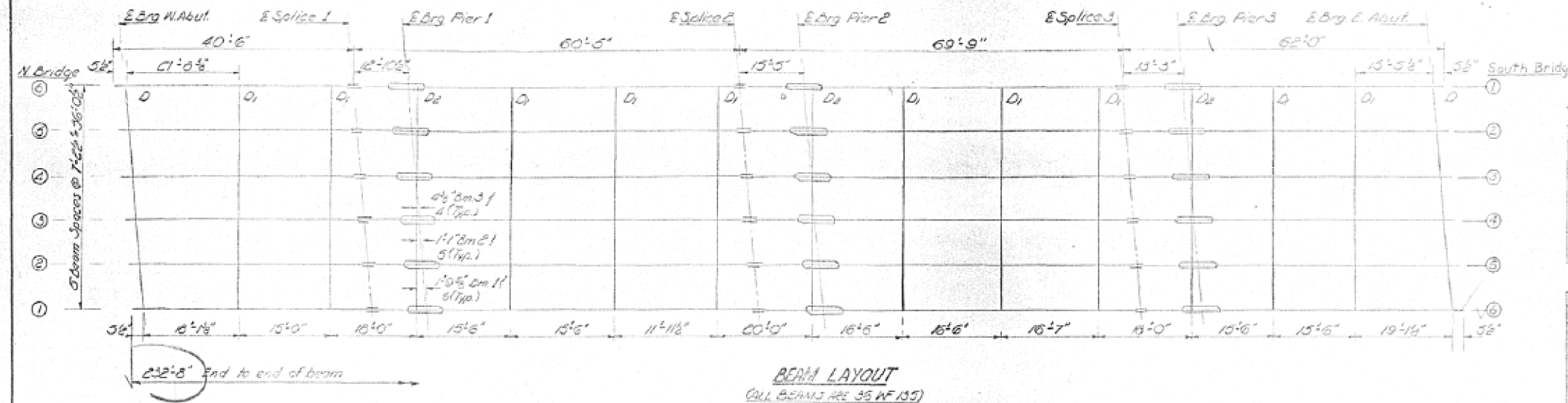
ILLINOIS FED. AID PROJECT

FILE NAME:	USER NAME:	DESIGNED:	REVISED:
et:\pwork\puidot\ea\inga\d0200193\0574717 Structure Repair Plans.sht.dgn	ea\inga	-	-
PLOT SCALE:	CHECKED:	REVISED:	REVISED:
48.0000' / in.	-	-	-
PLOT DATE:	DATE:	REVISED:	REVISED:
10/16/2014	-	-	-

AS-BUILT PLANS FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
74-3BVB	PIATT	50	18



ELEVATION TOP OF WF S. BRIDGE
(For Fabrication Only)

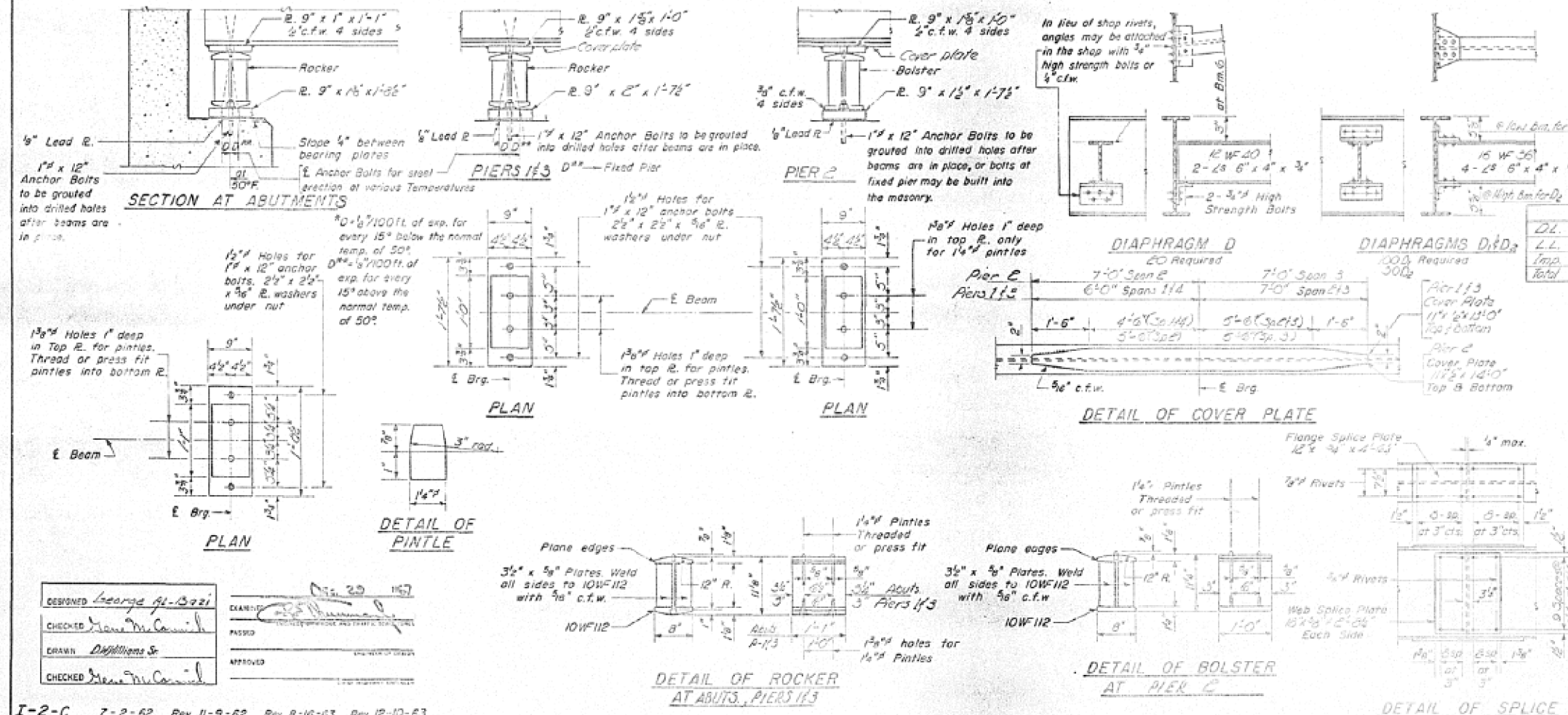
Span	Em 1	Em 2	Em 3	Em 4	Em 5	Em 6
E. Brg. N. Ab.	762.69	762.23	762.04	762.21	762.78	762.62
E. Splice 1	762.71	762.24	762.55	762.25	762.75	762.63
E. Brg. P. 1	762.72	762.25	762.26	762.00	762.75	762.24
E. Splice 2	762.75	762.21	762.02	762.58	762.24	762.69
E. Brg. P. 2	762.75	762.21	762.02	762.24	762.24	762.69
E. Splice 3	762.20	762.24	762.04	762.25	762.25	762.71
E. Brg. P. 3	762.20	762.25	762.04	762.26	762.25	762.71
E. Brg. S. Ab.	762.21	762.24	762.02	762.20	762.27	762.72

ELEVATION TOP OF WF N. BRIDGE
(For Fabrication Only)

Span	Em 1	Em 2	Em 3	Em 4	Em 5	Em 6
E. Brg. N. Ab.	762.68	762.21	762.20	762.26	762.74	762.51
E. Splice 1	762.70	762.23	762.24	762.24	762.74	762.61
E. Brg. P. 1	762.71	762.24	762.25	762.25	762.71	762.62
E. Splice 2	762.71	762.20	762.02	762.00	762.24	762.68
E. Brg. P. 2	762.72	762.21	762.02	762.25	762.25	762.69
E. Splice 3	762.20	762.25	762.02	762.25	762.25	762.72
E. Brg. P. 3	762.20	762.25	762.02	762.26	762.25	762.72
E. Brg. S. Ab.	762.21	762.24	762.02	762.20	762.27	762.72

REACTIONS - KIPS (INT. BEAMS)

	N. Abut.	Pier 1	Pier 2	Pier 3	S. Abut.
D.L.	23.7	75.1	77.8	76.6	15.0
L.L.	37.3	48.4	47.0	46.4	36.3
Imp.	10.5	12.7	12.6	12.7	10.4
Total	71.5	134.2	136.3	135.7	61.7



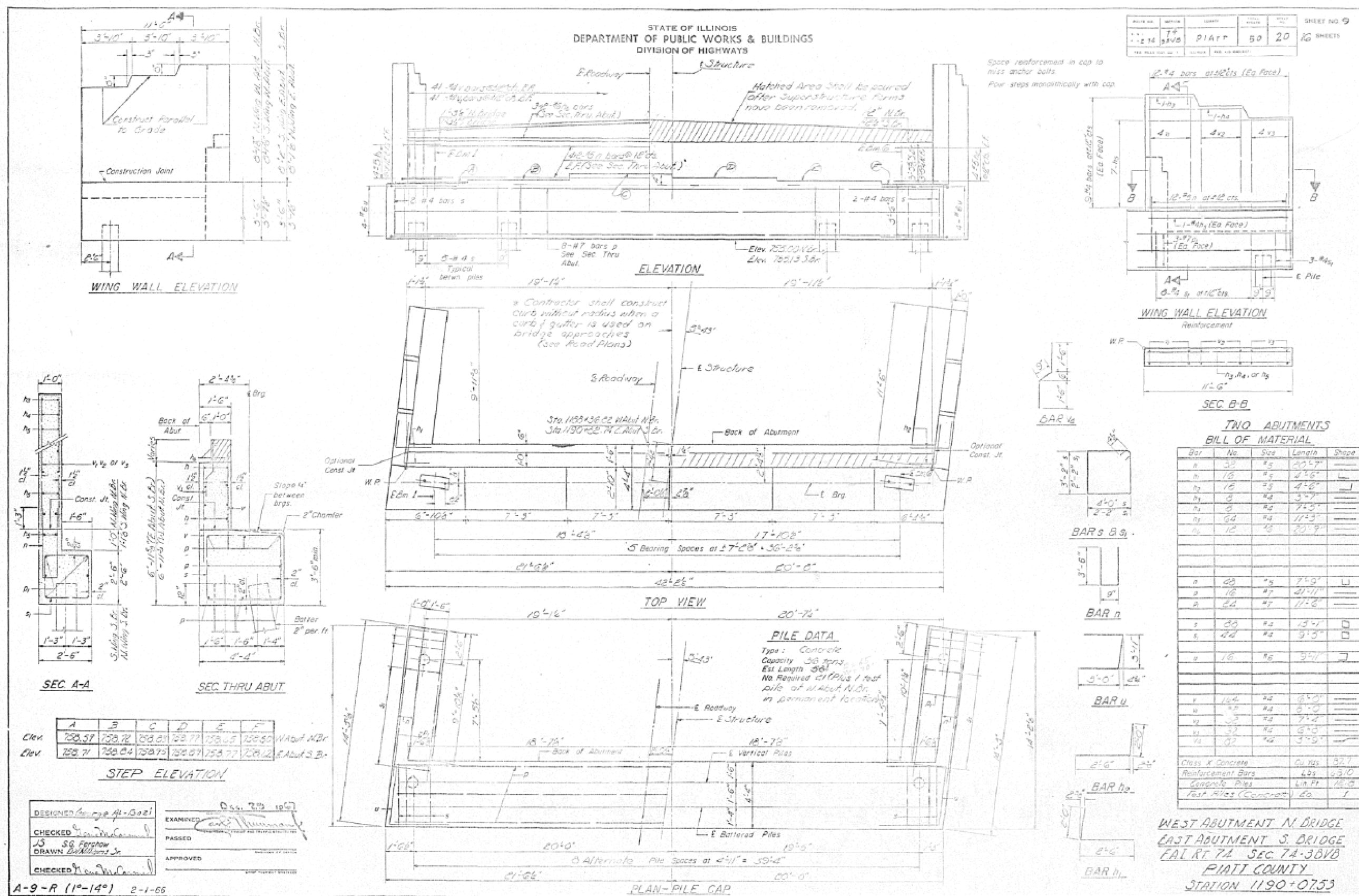
MOMENTS FT.-KIPS (INT. BEAMS)

	N. Abut.	Pier 1	Pier 2	Pier 3	S. Abut.
D.L.	235.0	334.8	122.7	485.7	894.3
L.L.	328.9	294.1	222.8	322.0	252.5
Imp.	101.9	31.7	23.8	24.7	24.3
Total	665.8	660.6	479.2	832.4	1171.1

DESIGNED George A. Bozi
 CHECKED Mark McCarroll
 DRAWN Dianna Sr.
 I-2-C 7-2-62 Rev. 11-9-62 Rev. 8-16-63 Rev. 12-10-63

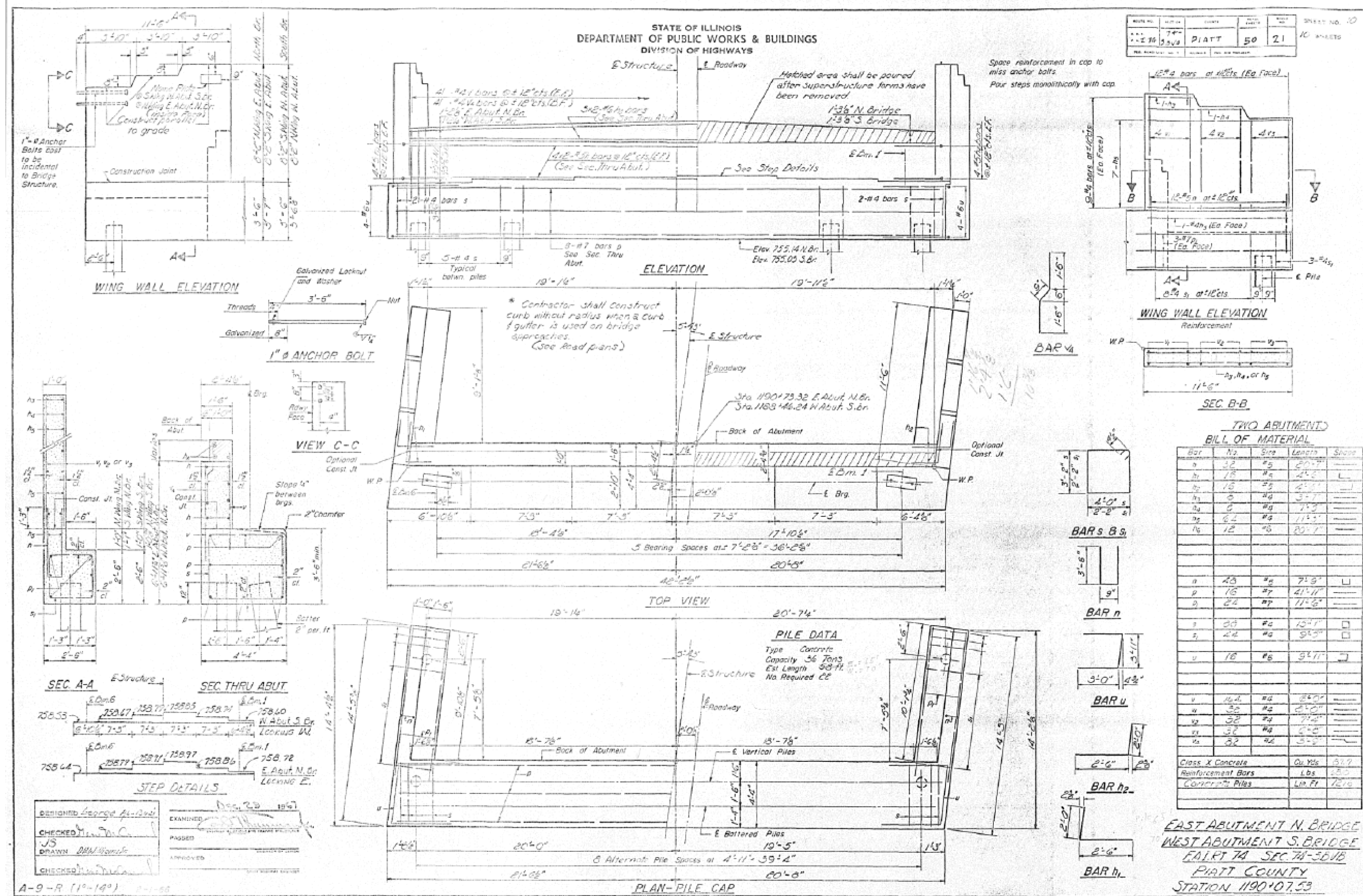
STRUCTURAL STEEL
 NORTH-SOUTH BRIDGES
 FAI. RT. 74 SEC. 74-3BVB
 PIATT COUNTY
 STATION 1190+07.53

AS-BUILT PLANS FOR INFORMATION ONLY



FILE NAME :	USER NAME : eaglinge	DESIGNED :	REVISED :	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS BUILT PLANS S.N. 074-0042 (EB) & S.N. 074-0043 (WB)	F.A.I. RT.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
ct:\pwork\puidot\ea\linge\d0200193\0576717 Structure Repair Plans-sht.dgn		DRAWN :	REVISED :			74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	147
PLOT SCALE = 48.0000 ' / in.		CHECKED :	REVISED :			SCALE: SHEET 26 OF 28 SHEETS STA. TO STA.		CONTRACT NO. 70717		
PLOT DATE = 10/16/2014		DATE :	REVISED :			ILLINOIS FED. AID PROJECT				

AS-BUILT PLANS FOR INFORMATION ONLY



ROUTE NO.	74	COUNTY	PIATT	SHEET NO.	21	TOTAL SHEETS	10
PROJECT NO.	50	SECTION	21				

TWO ABUTMENT
BILL OF MATERIAL

Bar	No	Size	Length	Shape
a	32	#5	20'-7"	
b	16	#6	21'-2"	
c	15	#5	21'-11"	
d	6	#4	3'-7"	
e	6	#4	7'-3"	
f	6	#4	11'-5"	
g	12	#6	20'-7"	
h	23	#4	7'-9"	
i	16	#7	21'-11"	
j	22	#7	11'-6"	
k	23	#4	15'-7"	
l	24	#6	9'-5"	
m	16	#6	9'-11"	
n	16	#4	8'-0"	
o	32	#4	2'-0"	
p	32	#4	7'-4"	
q	32	#4	5'-0"	
r	32	#4	5'-5"	

Class X Concrete Cu Yds 51.7
Reinforcement Bars Lbs 250
Concrete Piles Lin Ft 1216

PILE DATA
Type Concrete
Capacity 36 Tons
Est Length 58 ft
No Required CC

EAST ABUTMENT N. BRIDGE
WEST ABUTMENT S. BRIDGE
FAHRT 74 SEC 74-351B
PIATT COUNTY
STATION 1190+07.53

AS-BUILT PLANS FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO.	SECTION	COUNT	TOTAL SHEETS	SHEET NO.	SHEET NO.
74-2	74-2	PIATT	50	13	10 sheets

GENERAL NOTES

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

Slope Wall shall be reinforced with welded wire fabric 6x6 mesh, weighing 66 lbs per 100 sq. ft.
Layout of Slope walls may be varied to suit ground conditions in the field as directed by the Engineer.
All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Rivets 3/4" & Open Holes 3/4", unless otherwise noted.
Anchor bolts shall be set before fastening diaphragms over supports.
Exposed surfaces of the expansion devices, inaccessible after erection, shall receive two shop coats of red lead paint. All other surfaces shall be given one shop coat of red lead paint. Anchor studs shall not be painted.

Except as otherwise provided all structural steel shall receive one shop coat of red lead paint and two field coats of Aluminum paint.

Concrete piles of abutments shall be driven in holes prepared thru the embankment in accordance with Article 33.09 of standard specifications.

The Contractor shall drive three concrete test piles one each at N. Abut. W. Coll. Lane, Pier 1 East Land Lane and, S. 5th. Cd. Lane, in permanent locations as directed by the Engineer before ordering the remainder of piles.

Excavation for portions of structures in the embankment shall not be classified.

FIELD WEARING SURF CONSTRUCTION ACCORDING TO THE BOTTOM FINISH OR FOR A DEPTH OF 4" OF THE SPAN RAIL AND WITH PIER SURFACING ON THE TOP FINISH OF BRIDGE OR CHUTE SHALL BE PERMITTED. FIELD WEARING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

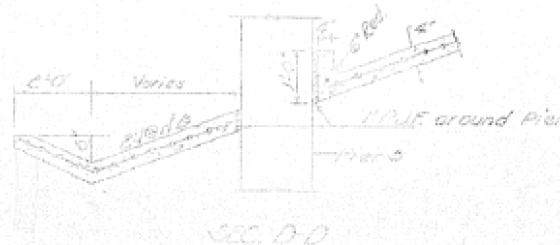
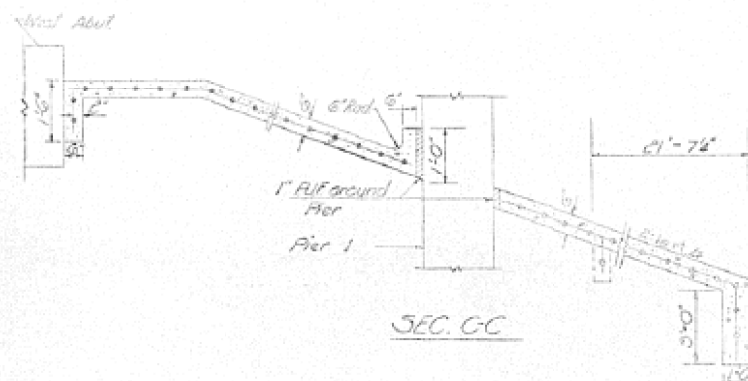
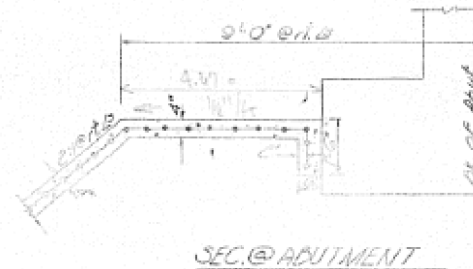
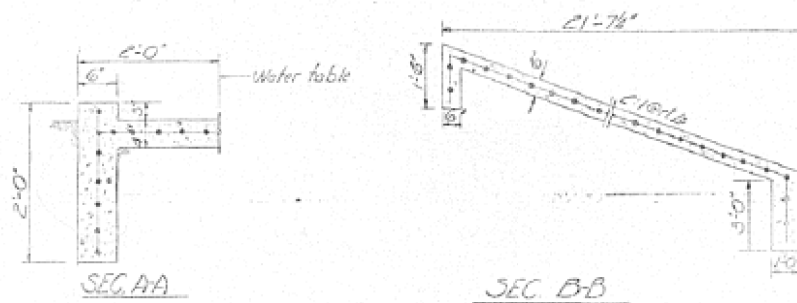
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Protective Coat	Sq. yds.	2450		2450
Structural Steel	Lbs.	23380		23380
Aluminum Painting	Lin. Ft.	939		939
Pipe Culverts (6" x 6" x 6")	Lin. Ft.			240
Reinforcement Bars	Lbs.	134,040	20,000	154,040
Class X Concrete	Cu. Yds.	3872	7757	11629
Class B Concrete (20' x 4' x 3')	Lin. Ft.			600
Concrete Piles	Lin. Ft.			5007
Test Piles (Concrete)	Ea.		3	3
Name Plates	Ea.		2	2
Slope Wall (4')	Sq. Yds.		950	950
Bridge Seat Slab	Lin. Sum.			1
Slope Wall (6')	Sq. Yds.		3660	3660
Class A Excav. for Structure	Cu. Yds.		240	240
Class B Excav. for Structure	Cu. Yds.		200	200

* Includes application on inside vertical face, top and exposed end of abutment wings.
** Includes excavation for slope walls.

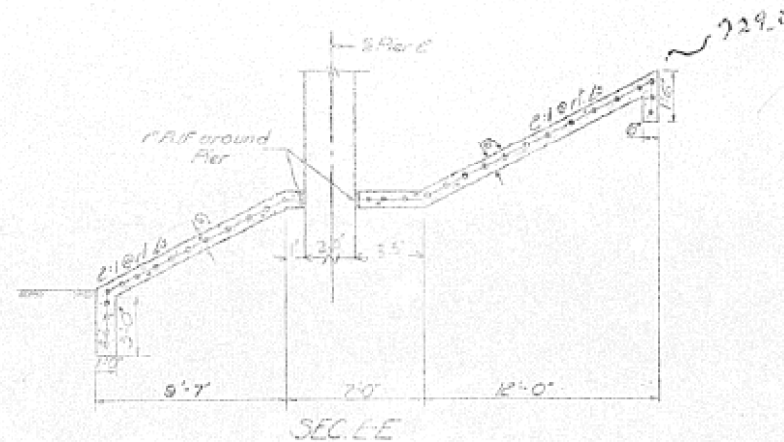
The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Normal Concrete.

GENERAL PLAN/ELEVATION DETAILS
F.A.I. 74 SEC. 74-30VB
FRONT 116-74-5 (48)
PIATT COUNTY
STA. 1190+07.53



STATION 1190+07.53
BUILT 199 BY
STATE OF ILLINOIS
F.A.I. R1 74 SEC. 74-30VB
F.A. FRONT 116-74-5 (48)
LOADING HS 20 / ALT.
Name Plate
(See Std. 2113.1)

DESIGNED <i>George A. Coz.</i>	EXAMINED <i>[Signature]</i>
CHECKED <i>Don McConnel</i>	PASSED <i>[Signature]</i>
DRAWN <i>Don McConnel</i>	APPROVED <i>[Signature]</i>
CHECKED <i>Don McConnel</i>	DATE <i>10/16/2014</i>



Structures 074-0040 was built in 1970 as FAI-74 (EB), Section 74-2HB at Station 1007+69.76 by the State of Illinois in Piatt County. The structure consist of approach spans of 33'-6" and two main spans of 91'-8½". The main spans of the structure consist of 7½" reinforced concrete deck on 48" steel plate girders. The approach spans of the structure consist of a 7½" reinforced concrete deck of 36" PPC I-Beams. The spans are on a spread footing supported pier and concrete pile supported abutments.

The existing structures have a back to back of approach length of 254'-11", an out to out width of 30'-0", and a roadway clear width of 28'-0". The structures are skewed 9°-00' left forward.

Method of Construction: ROAD CLOSURE

PROPOSED WORK

1. Perform Full-Depth Patching at Drains.
2. Place new Floor Drains.
3. Replace Existing Bearings with Elastomeric Bearings at Abutments.
4. Removal of Existing Preformed Joint Sealer.
5. Place Silicone Joint Sealer.
6. Construct Wingwall Extensions.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU YD	0.5
FLOOR DRAINS	EACH	4.0
CONCRETE SUPERSTRUCTURE	CU YD	1.1
PROTECTIVE COAT	SQ YD	10.0
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1,480.0
REINFORCEMENT BARS, EPOXY COATED	POUND	450.0
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	8.0
ANCHOR BOLTS, 1"	EACH	16.0
JACK AND REMOVE EXISTING BEARINGS	EACH	8.0
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	2.8
SILICONE JOINT SEALER, 1 .50"	FOOT	60.0

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction 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 work. However, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

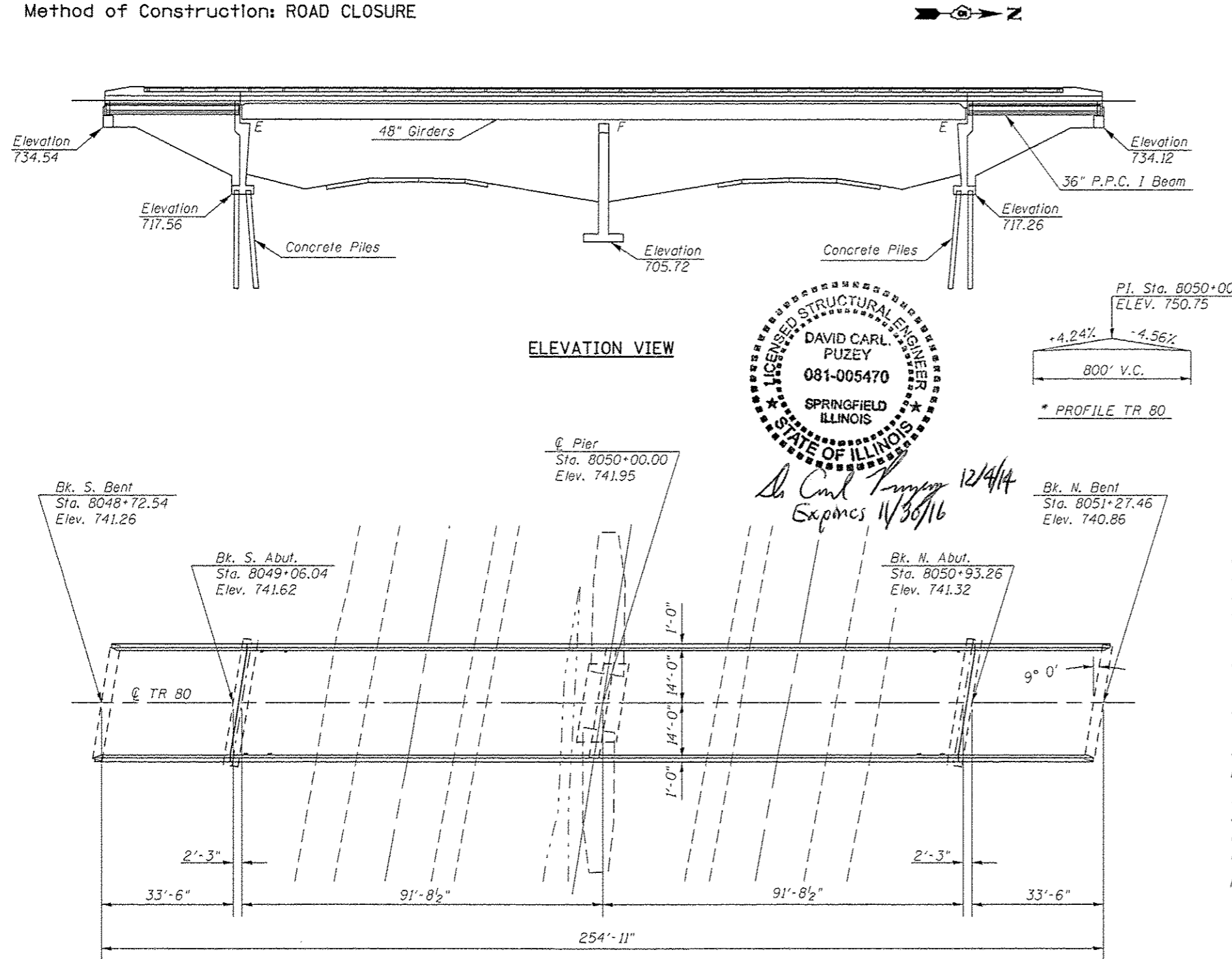
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Joint openings shall be adjusted according to article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.

If the analysis submitted to the Contractor for the Jacking/Temporary support system to be used shows temporary stiffeners are required to prevent web crippling or buckling, the stiffeners shall be steel and bolted to the web. If the stiffeners are not required, hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation.

Reinforcement bars designated (E) shall be epoxy coated.



* AS-BUILT INFORMATION

PLAN VIEW

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
S.N. 074-0040

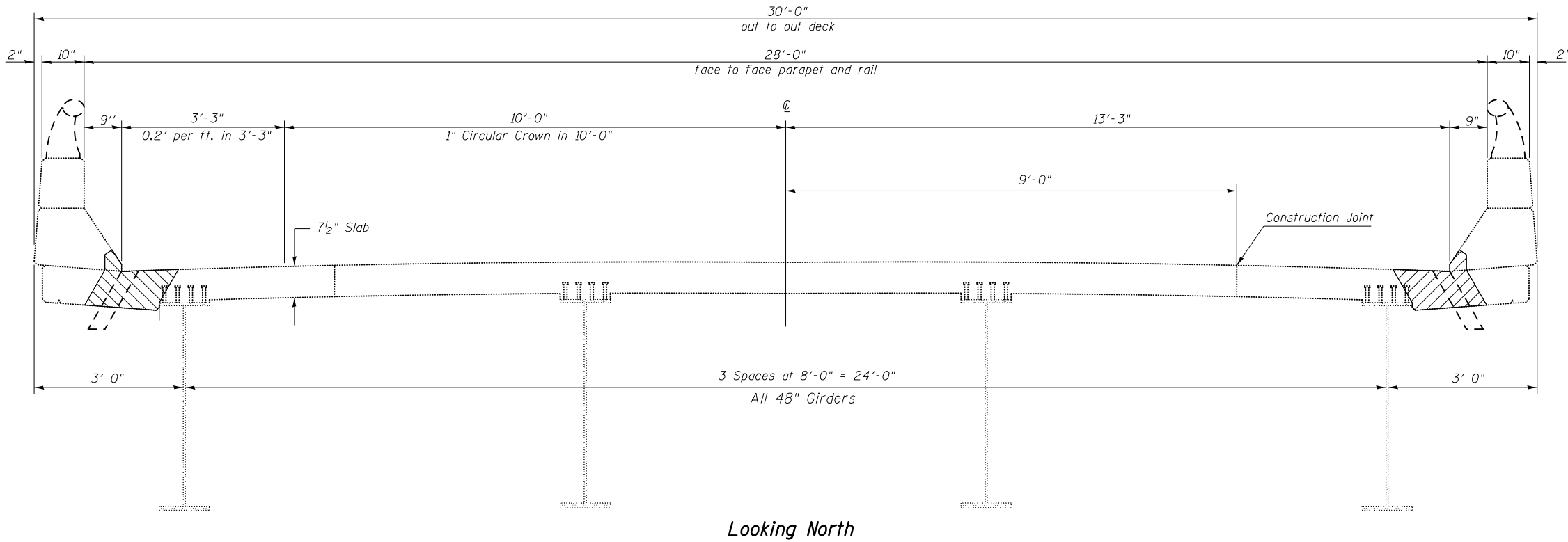
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	150
				CONTRACT NO. 70717

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
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717 Structure Repair Plans-sht.dgn		DRAWN :	ESS
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		DATE :	1-10-2013
		REVISED :	-
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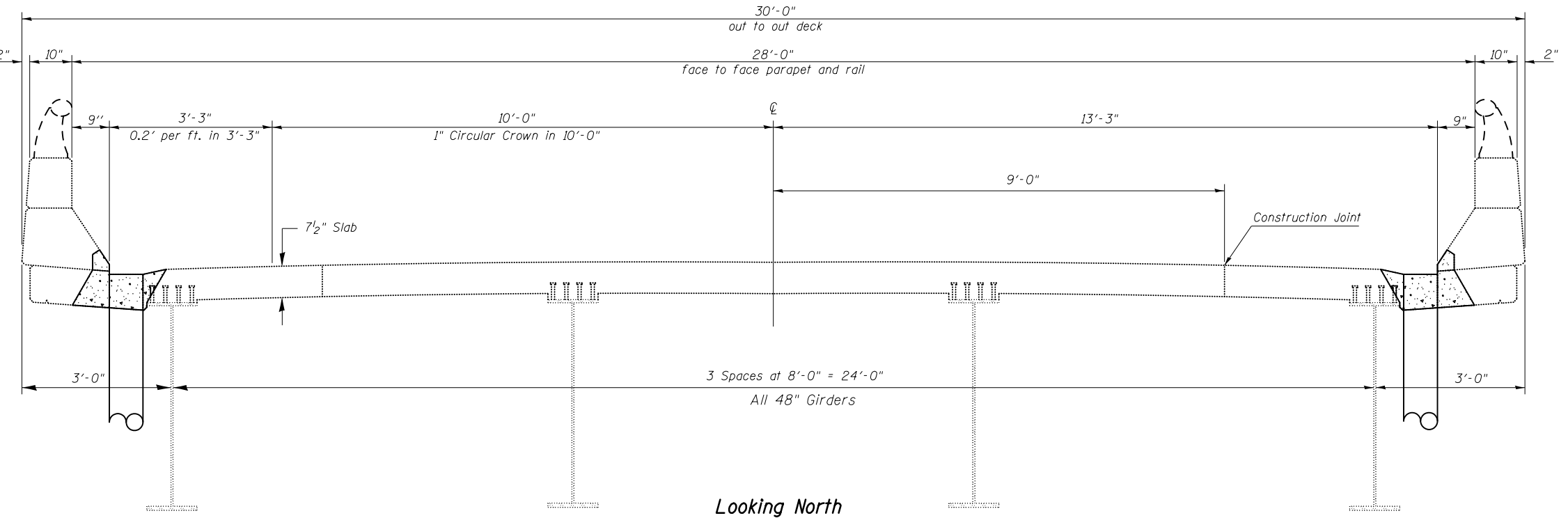
SCALE: SHEET 1 OF 11 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

EXISTING CROSS SECTION



PROPOSED CROSS SECTION



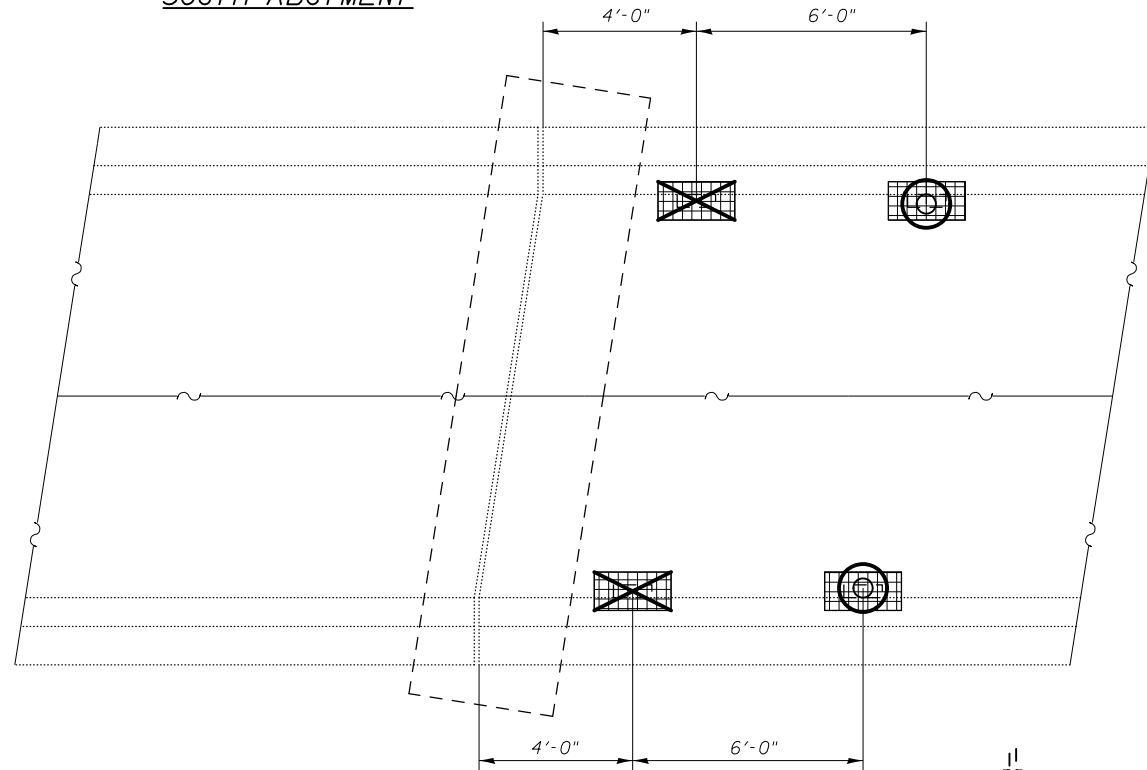
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	PLOT DATE = 10/16/2014	DATE - 1-11-2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

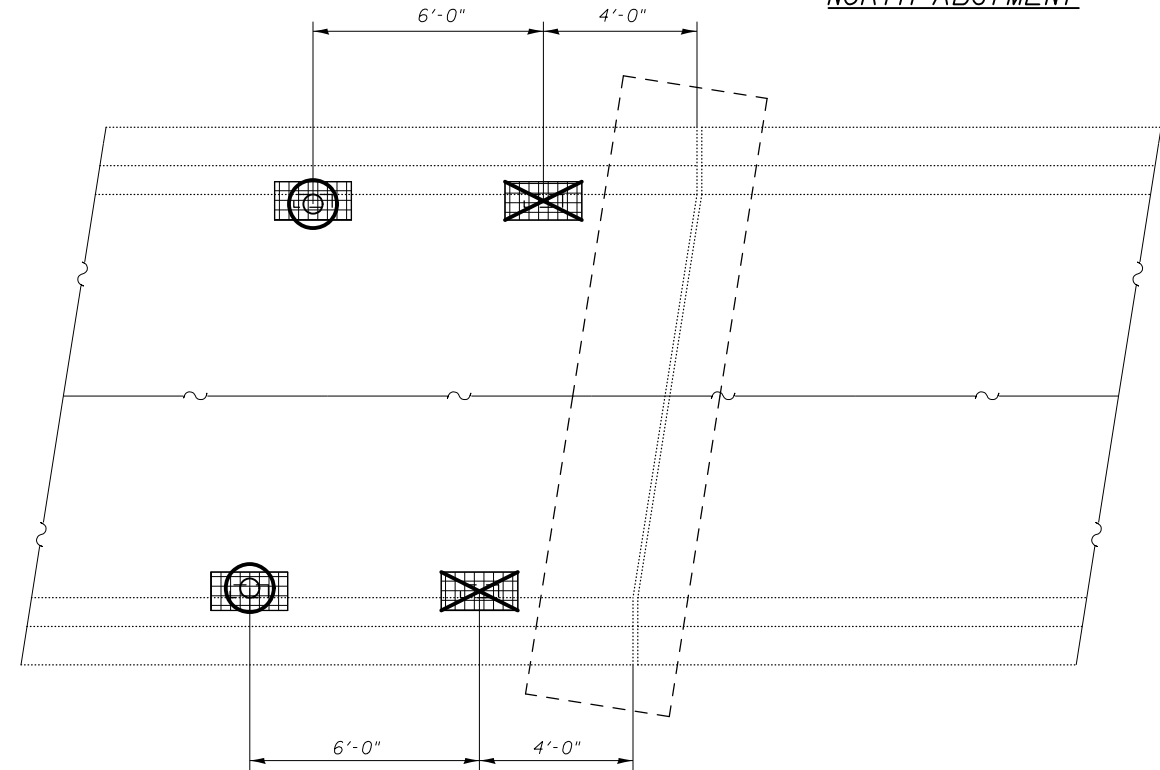
TYPICAL DECK CROSS SECTION			
S.N. 074-0040			
SCALE:	SHEET 2 OF 11 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	151
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				

SOUTH ABUTMENT



NORTH ABUTMENT



LEGEND

Eliminate floor drain

Proposed floor drain location

Deck Slab Repair (Full Depth, Type I) at all Drain Locations. All repair areas are 2'-0" x 1'-7" minimum unless otherwise determined by the Engineer.

NOTES:

Patch sizes shown represent conditions at the time the plans were completed. The actual sizes and locations of patching shall be determined by the engineer. The Engineer shall show the actual locations of the deck repairs on this sheet.

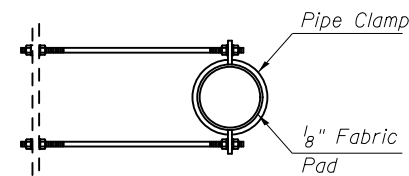
The existing drains and extensions shall be removed. Cost included with "Deck Slab Repair (Full Depth, Type I)".

Extreme care must be used when removing concrete near the top flange of the plate girder. The contractor is responsible for any damage to the plate girder.

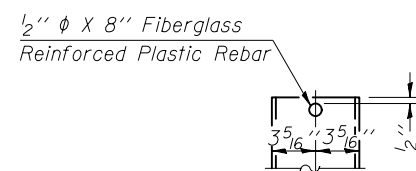
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Society of Protective Coatings' Spec. SSPC-SP1 prior to painting. Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress OF 30,000 P.S.I. minimum. Galvanize clamping device according to AASHTO M232. Cost of clamping device and galvanizing included with Floor Drains.

BILL OF MATERIAL

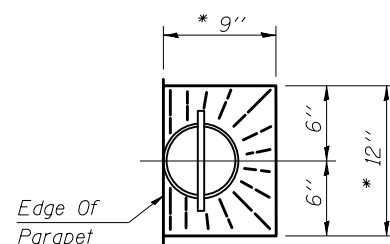
ITEM	UNIT	QUANTITY
FLOOR DRAINS	EACH	4.0
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	2.8



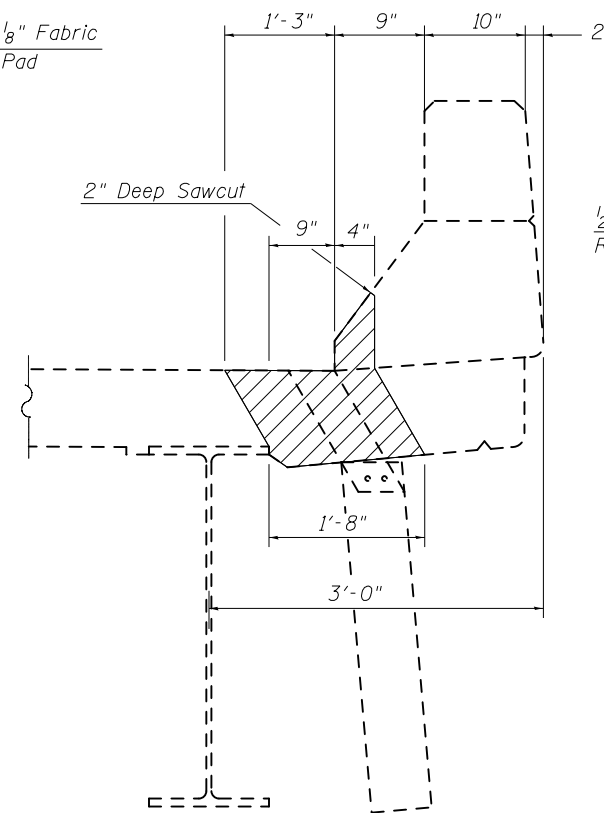
TOP PLAN
Drain Clamp



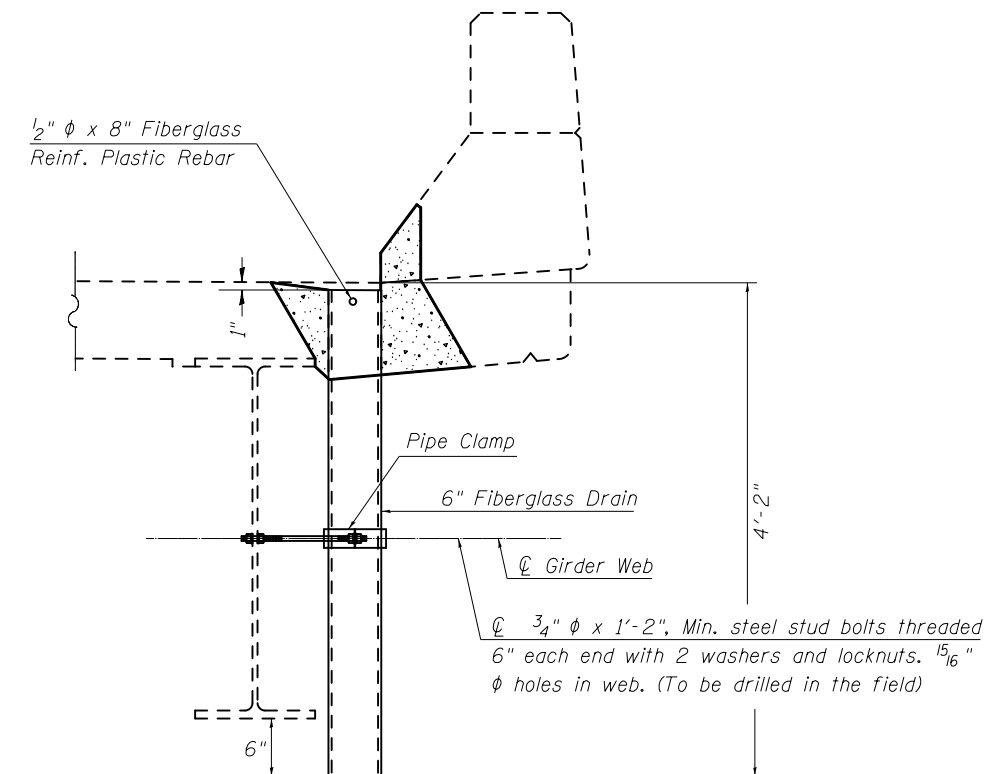
FIBERGLASS PIPE



TOP PLAN
* SLOPE TO DRAIN



EXISTING
Removal Limits for Deck Slab Repair (Full-Depth, Type I) at Drain Locations



PROPOSED

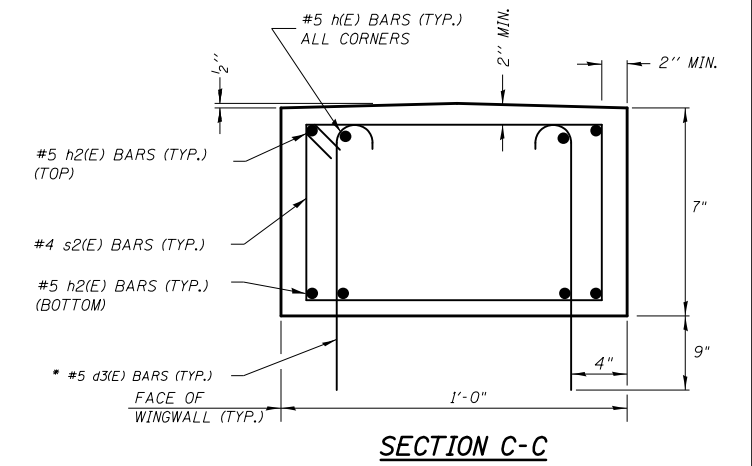
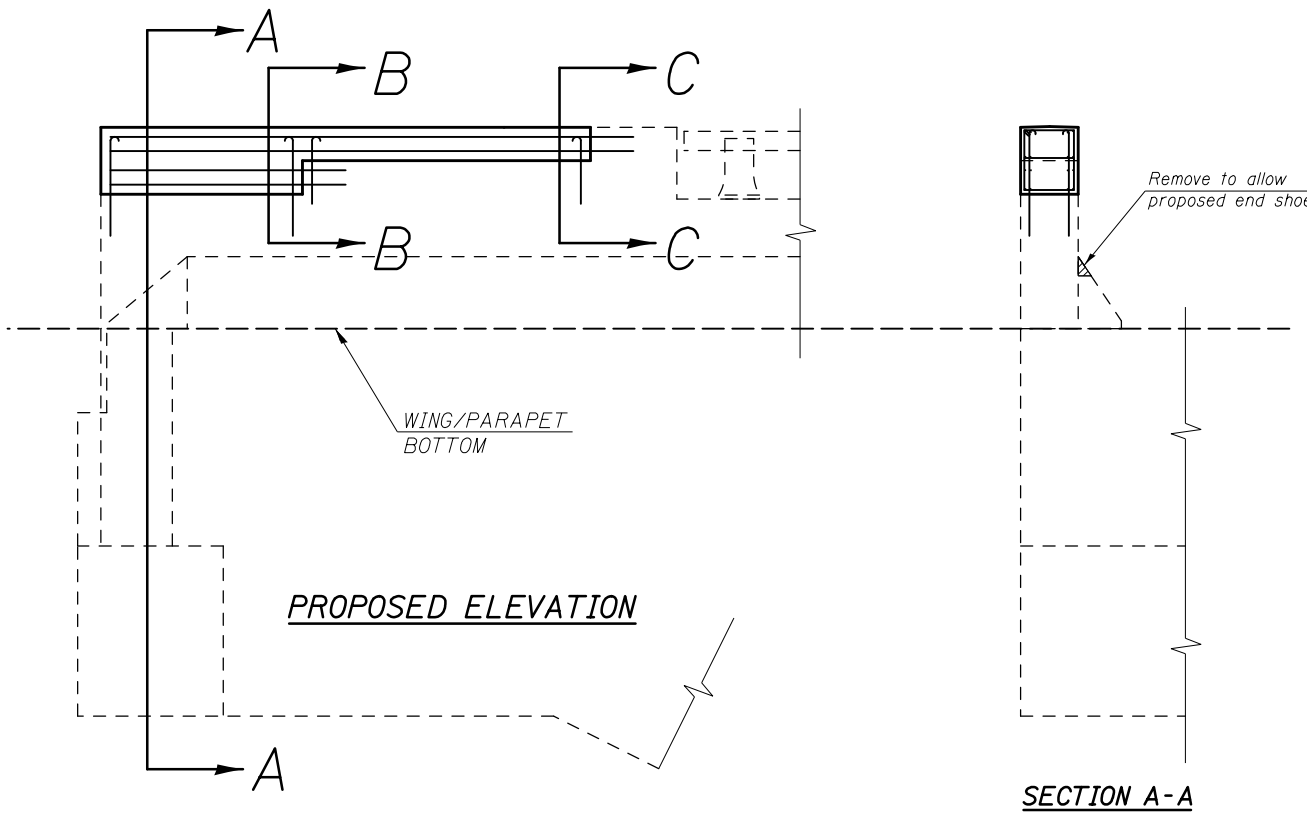
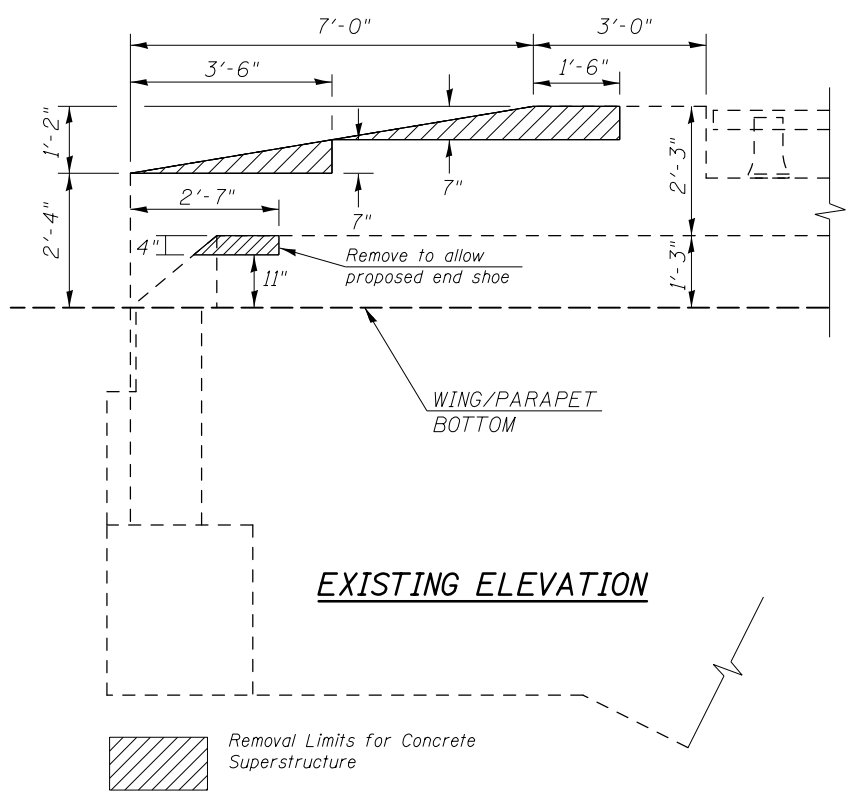
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	PLOT SCALE = 40.0000' / in.	CHECKED - TJB	REVISED -
	PLOT DATE = 10/16/2014	DATE - 1-17-2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

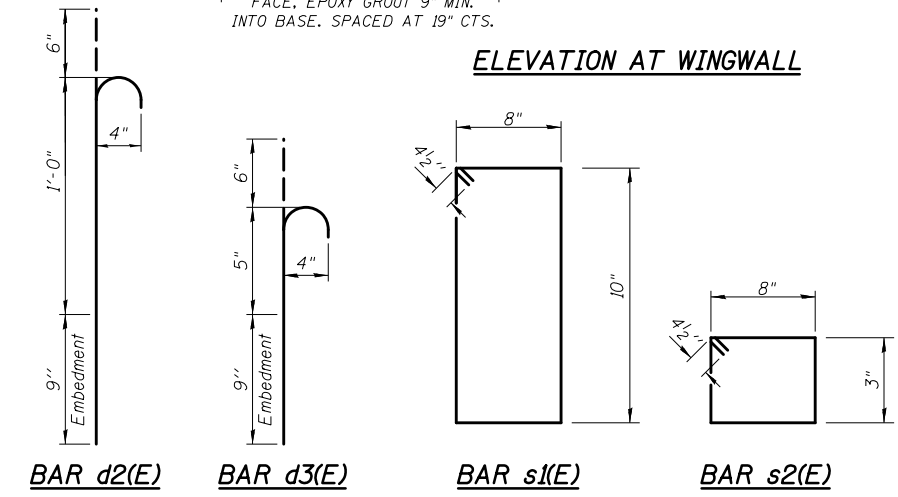
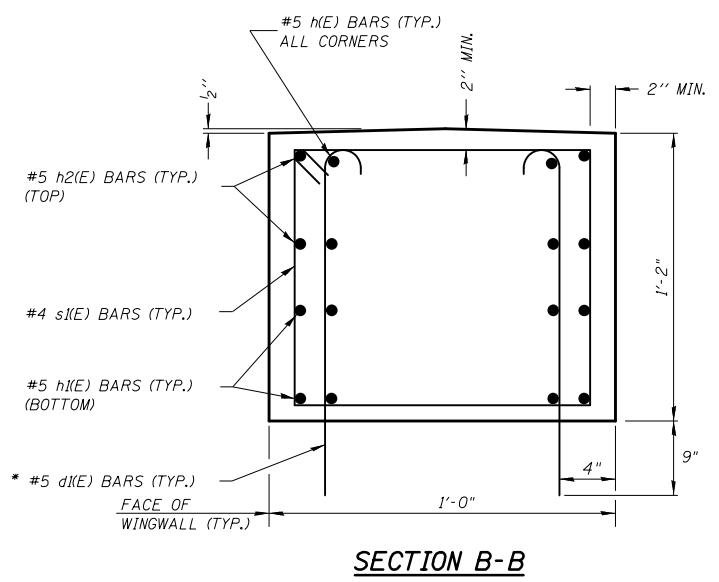
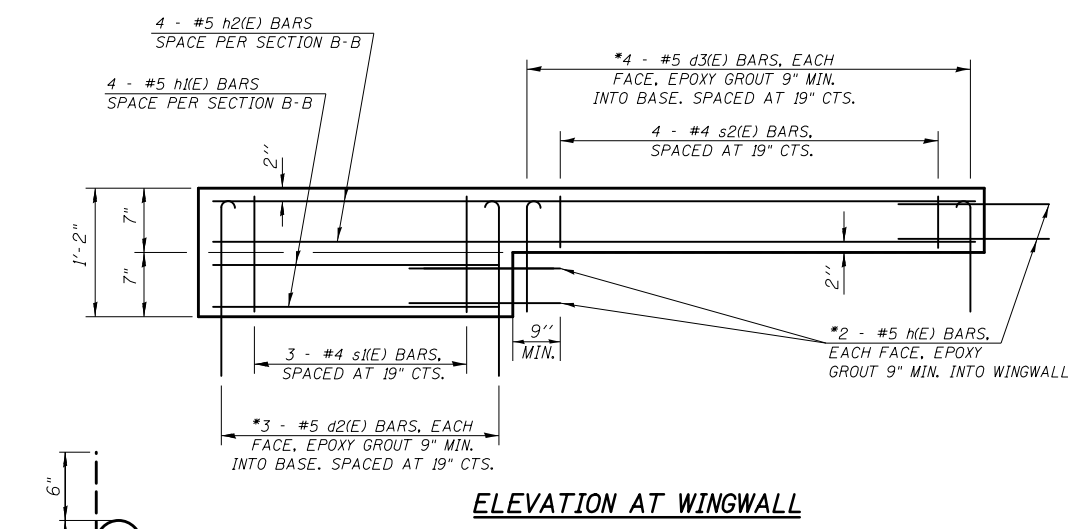
SUPERSTRUCTURE PLAN - DRAIN DETAIL
S.N. 074-0040

SCALE: SHEET 4 OF 11 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	153
			CONTRACT NO. 70717	
ILLINOIS FED. AID PROJECT				



* EPOXY GROUT BARS IN 9" MIN. HOLES ACCORDING TO ARTICLE 584 OF THE STANDARD SPECIFICATIONS.



GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION 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 WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

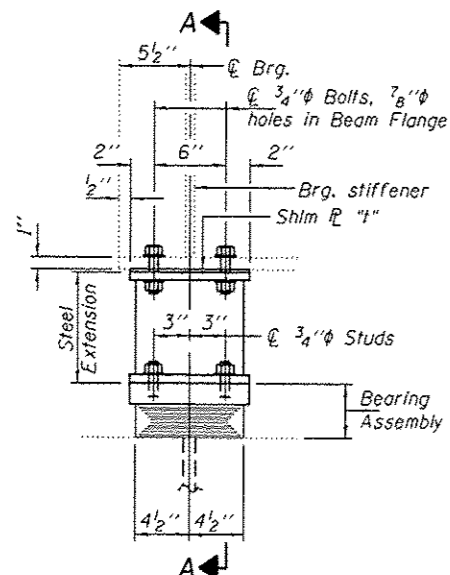
THE COST OF EPOXY GROUTING BARS SHALL BE INCLUDED WITH REINFORCEMENT BARS (EPOXY COATED).

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 OR GR 60. SEE SPECIAL PROVISIONS.

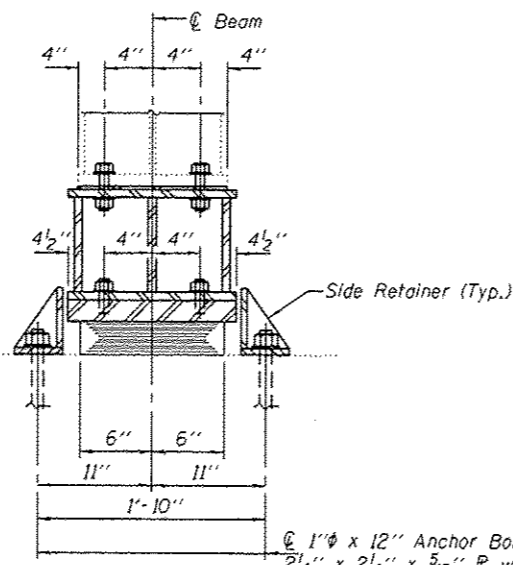
REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

BILL OF MATERIALS				
BAR	SHAPE	NO.	SIZE	LENGTH
d2(E)		24	#5	2'-3"
d3(E)		32	#5	1'-8"
h(E)		32	#5	2'-5"
h1(E)		16	#5	3'-2"
h2(E)		16	#5	8'-2"
s1(E)		12	#4	3'-9"
s2(E)		16	#4	2'-7"
CONCRETE REMOVAL			CU. YD.	0.5
CONCRETE SUPERSTRUCTURE			CU. YD.	1.1
REINFORCEMENT BARS, EPOXY COATED			POUND	450.0
PROTECTIVE COAT			SQ YD	10.0

BILL OF MATERIAL QUANTITIES INCLUDE ALL 4 WINGWALLS.



ELEVATION



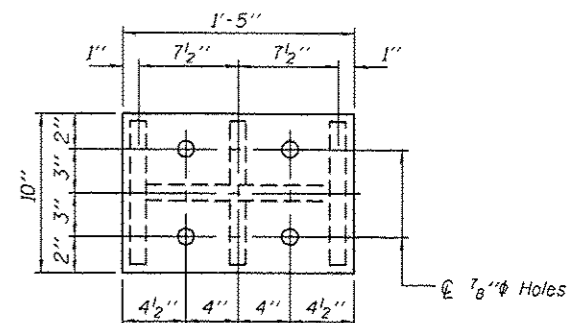
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

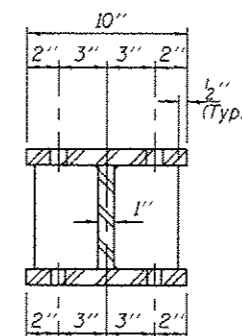
BEAM REACTIONS

R ₁	(K)	45.0
R ₂	(K)	34.6
Imp.	(K)	8.0
R (Total)	(K)	87.6

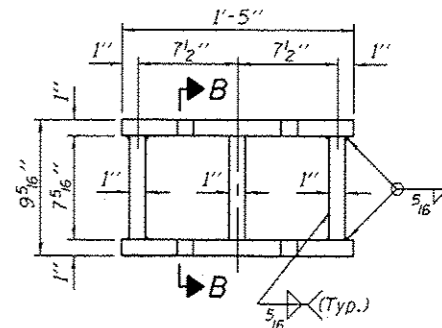
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel. Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. Jack capacity = 52 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



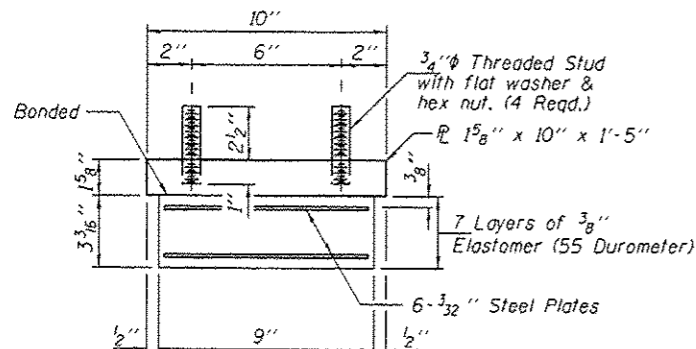
PLAN TOP AND BOTTOM PLATE



SECTION B-B



STEEL EXTENSION DETAIL

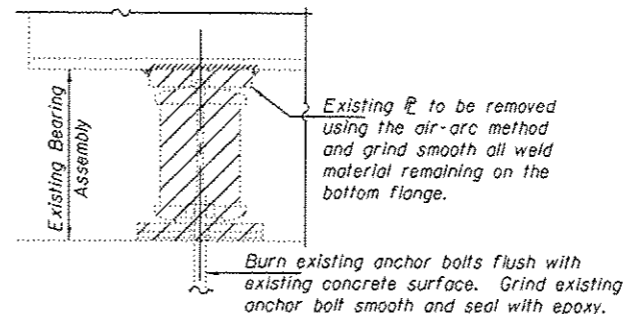


BEARING ASSEMBLY

Note:
 Shim plates shall not be placed under Bearing Assembly.

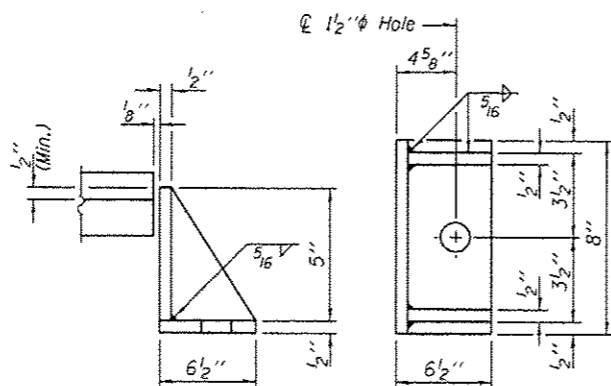
SHIM PLATE "4"

Location	G1	G2	G3	G4
N. Abut.	0	0	8"	3"
S. Abut.	3"	1"	0	0



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	8
Jack and Remove Existing Bearings	Each	8
Furnishing and Erecting Structural Steel	Pound	1480
Anchor Bolts 1"φ	Each	16

TYI/REPS 12-03-2008

DESIGNED VHV
 CHECKED DAB
 DRAWN baliva
 CHECKED VHV DAB

EXAMINED *Limy A. Solt*
 ACTING ENGINEER OF STRUCTURAL SERVICES
 PASSED *Carl Perry*
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - DECEMBER 3, 2014

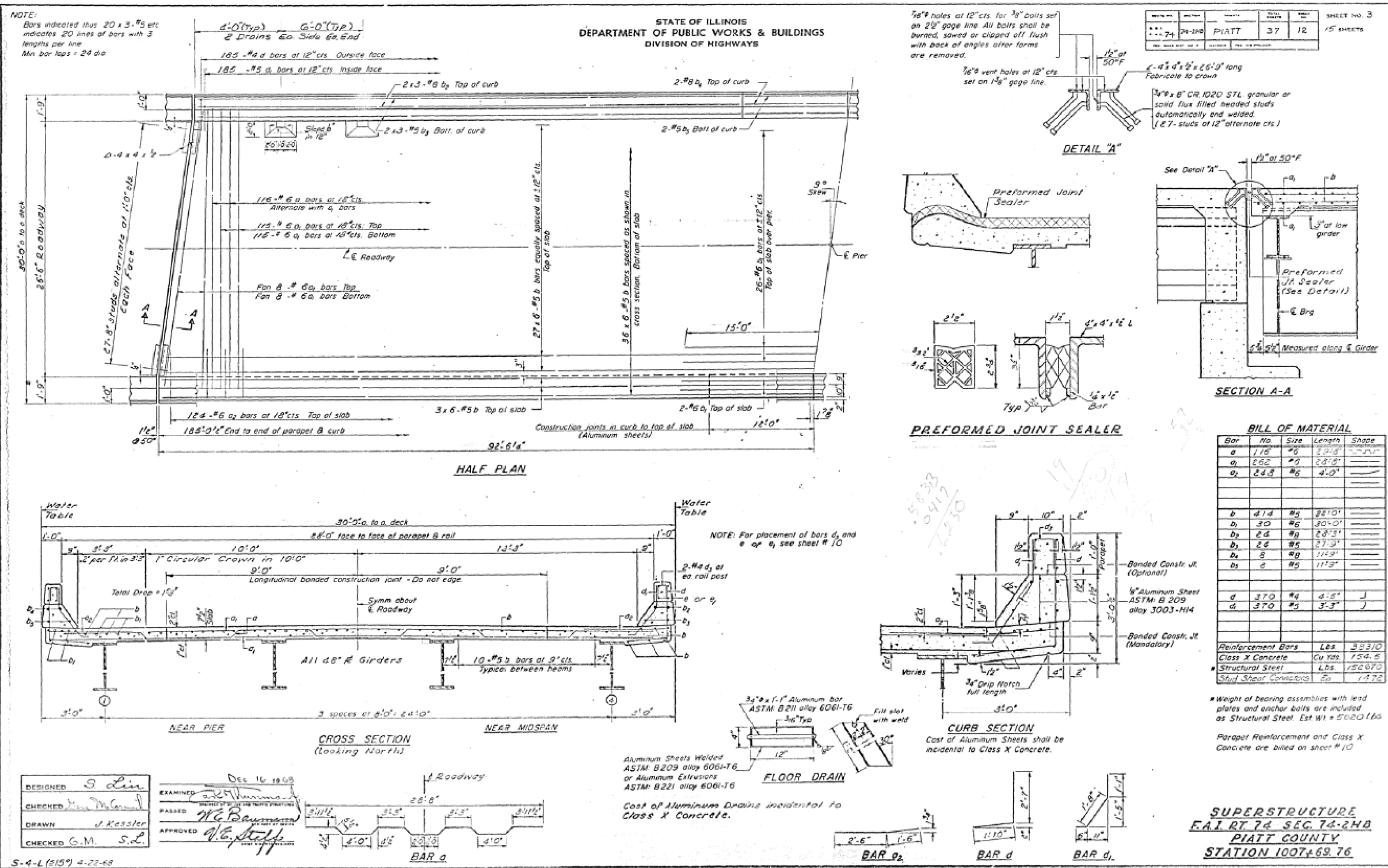
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

NORTH AND SOUTH ABUTMENT
 BEARING REPLACEMENT DETAILS
 SN 074-0040

SHEET NO. 6 OF 11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	174-21RS-2 & 174-31RS-3	PIATT	310	155
CONTRACT NO. 70717			ILLINOIS FED. AID PROJECT	

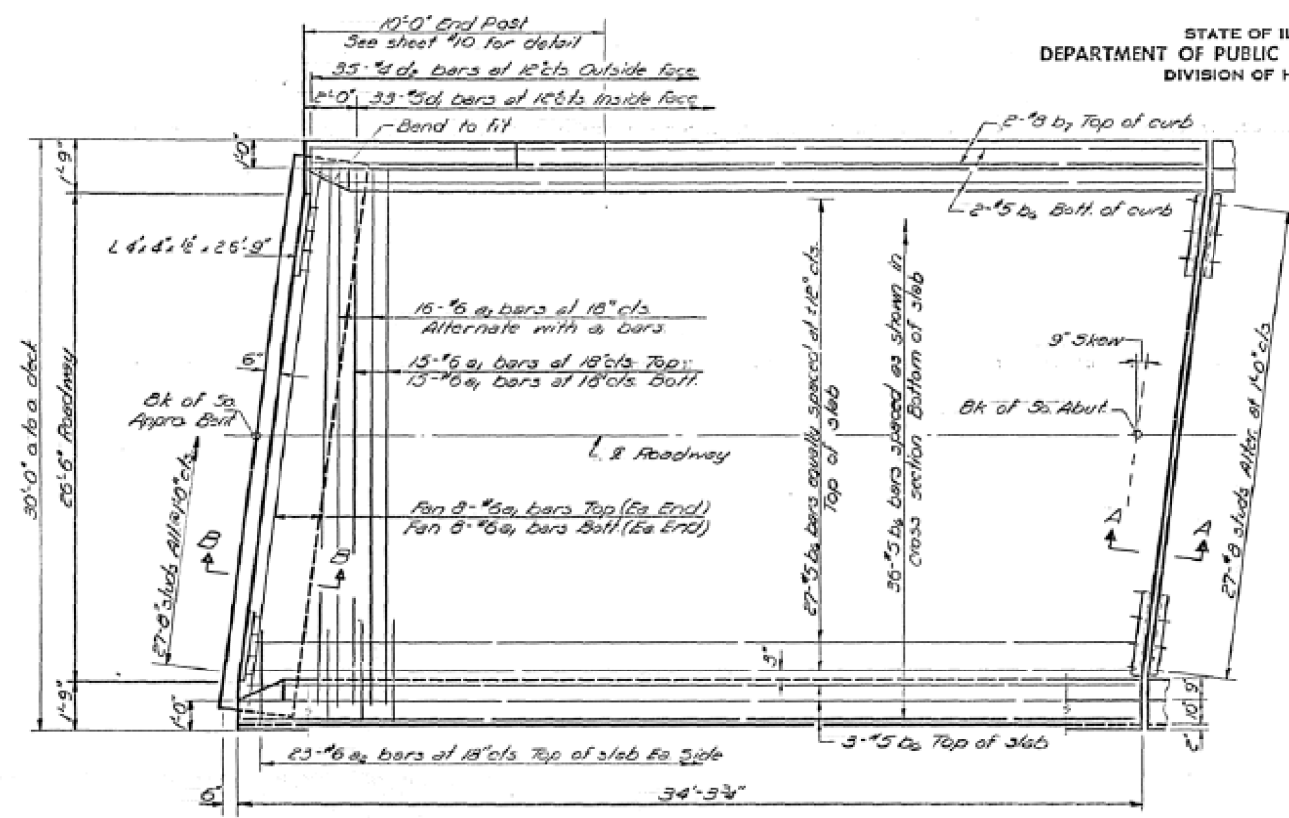
AS-BUILT PLANS FOR INFORMATION ONLY



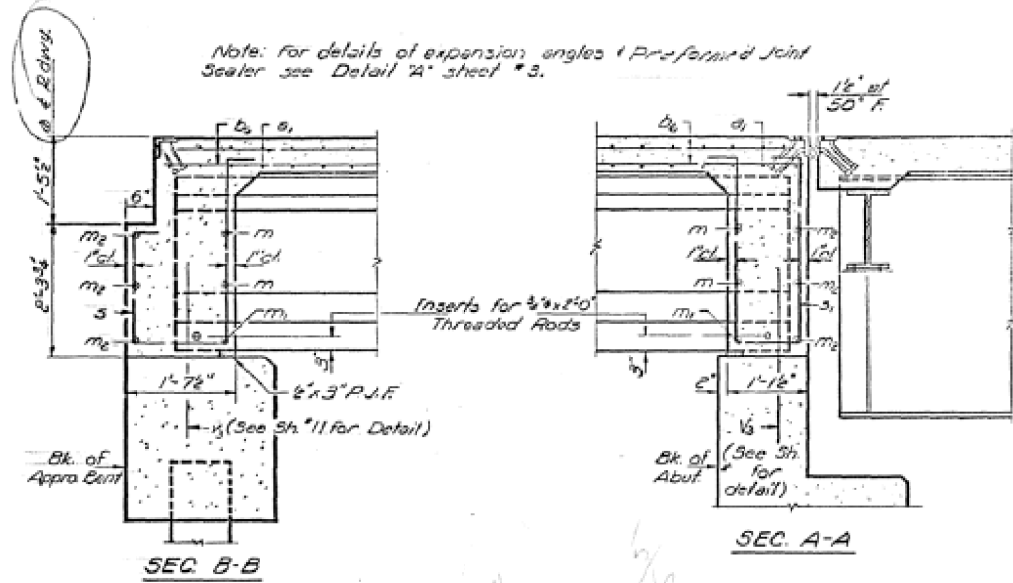
AS-BUILT PLANS FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.I. RT. 74	74-24B	PIATT	37	16
SHEET NO. 7 15 SHEETS				



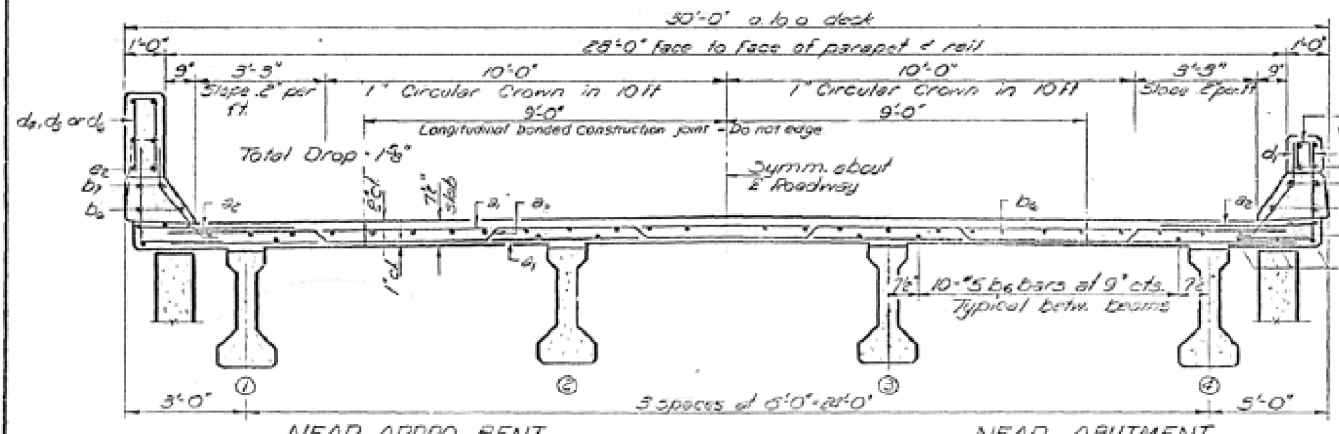
PLAN
(South Approach shown North Approach similar by rotation thru 180°)



SEC. B-B

SEC. A-A

Note: For details of expansion angles & Prefabricated Joint Sealer see Detail 'A' sheet #3.

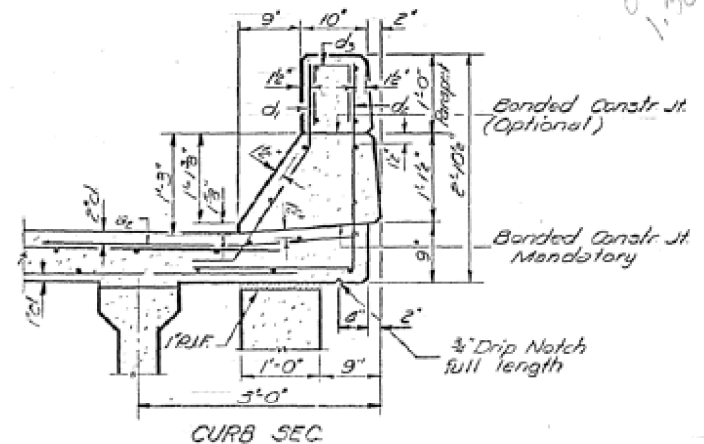


NEAR APPRO BENT

CROSS SECTION

NEAR ABUTMENT

(Looking North) ± Roadway



CURB SEC

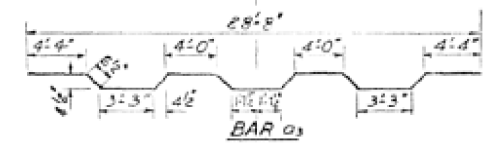
**TWO APPRO SPANS
BILL OF MATERIAL**

Bar No.	Size	Length	Shape
a ₁	10#	28'-0"	—
a ₂	4#	4'-0"	—
a ₃	3#	29'-8"	—
b ₁	10#	39'-0"	—
b ₂	8#	39'-0"	—
d ₁	13#	5'-3"	—
d ₂	18#	3'-7"	—
m	36#	7'-5"	—
m ₁	12#	6'-0"	—
m ₂	12#	29'-0"	—
m ₃	12#	6'-5"	—
s	36#	7'-7"	U
s ₁	36#	6'-5"	U
s ₂	36#	6'-10"	U
Reinforcement Bar			Lbs. 15310
Class X Concrete			Cu. Yds. 76.5
Structural Steel			Lbs. 1490

Parapet Reinforcement and Class X Concrete are billed on sheet #10
For placement and details of bars m thru m₃ and s thru s₂ see sheet #5
For details of bars a₂ and d₁ see sheet #3
Work this sheet with sheet #9 & #9

**APPROACH STRUCTURE
F.A.I. RT. 74 SEC. 74-24B
PIATT COUNTY
STA. 1007+59.76**

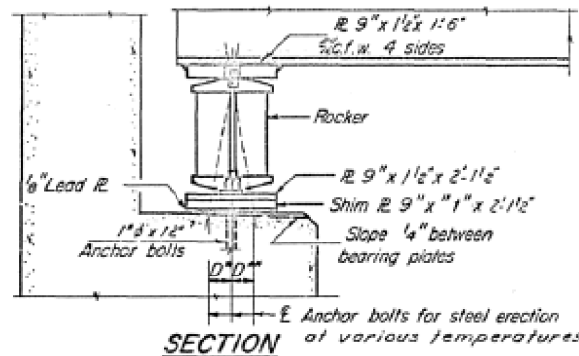
DESIGNED <i>S. Lin</i>	EXAMINED <i>[Signature]</i>
CHECKED <i>[Signature]</i>	PASSED <i>[Signature]</i>
DRAWN <i>J.M. HENNINGER</i>	APPROVED <i>[Signature]</i>
CHECKED <i>G.M. S.L.</i>	



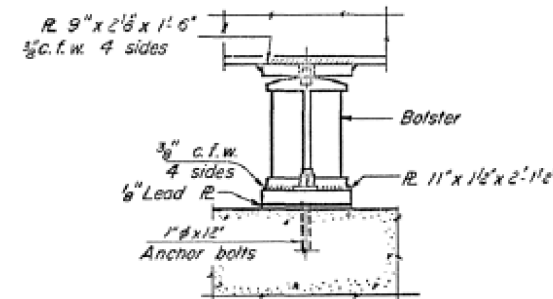
AS-BUILT PLANS FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

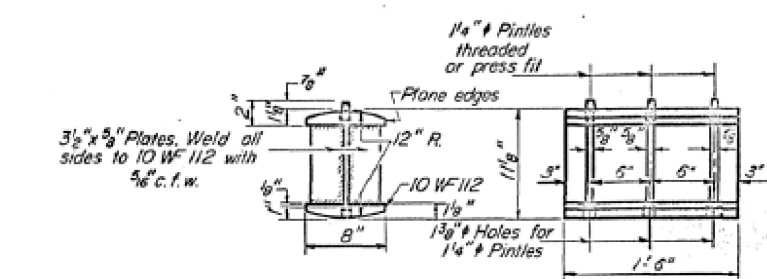
SHEET NO. 6	15 SHEETS
PIATT	37 15



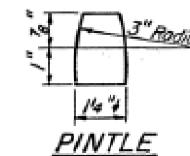
SECTION



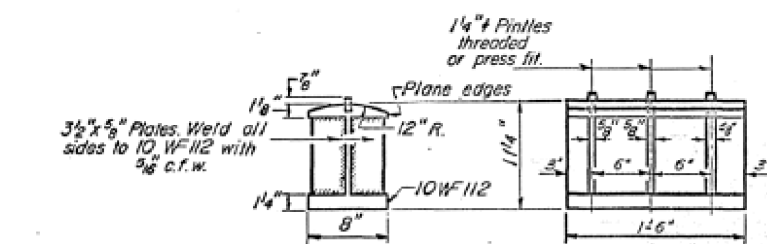
ELEVATION



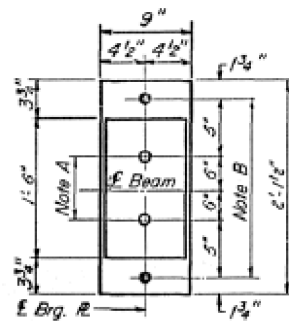
ROCKER



PINTLE



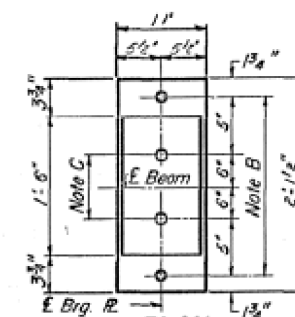
BOLSTER



**PLAN
AT ABUTMENT**

VALUES OF δ

Dist.	Curve	G-1	G-2	G-3	G-4
South Abut.		3/8"	1/8"	0"	0"
North Abut.		0"	0"	1/8"	3/8"



**PLAN
AT PIER**

NOTE C
1 3/8" Holes 1" deep in top R. only for 1/4" pintles.

NOTE A
1 3/8" Holes - 1" deep in top R. for pintles. Thread or press fit pintles into bottom R.

NOTE B
1 1/2" Holes for 1" anchor bolts. 2 1/2 x 2 1/2 x 3/16" R. Washers under nut.

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- a) D^* (Side of brg. away from fixed brg.)
 $D^* = \frac{1}{8}$ " per each 100' of expansion for every 15° fall below the normal temp. of 50°F
- D^{**} (Side of brg. toward fixed brg.)
 $D^{**} = \frac{1}{8}$ " per each 100' of expansion for every 15° rise above the normal temp. of 50°F
- b) After beams have been erected and dimensions D^* or D^{**} determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

BEARING ASSEMBLY DETAILS

D.L. = Dead Load.
S.D.L. = Superimposed dead load acting on composite section.
L.L. = Live Load.
Imp. = Impact.
I_s = Moment of inertia steel section.
S_{ts} = Sec. Mod. top steel section.
S_{bc} = Sec. Mod. bott. steel section.
I_c = Moment of inertia comp. sec.
S_{tc} = Sec. Mod. at top steel of comp. sec.
S_{bc} = Sec. Mod. bott. comp. sec.

PLATE GIRDER PROPERTIES

Steel Section	
I _s	1825.0 in ⁴
S _{ts}	670.3 in ³
S _{bc}	882.3 in ³
Composite Section	
I _c	4517.2 in ⁴
S _{tc}	4212.7 in ³
S _{bc}	1189.6 in ³

STRESS TABLE

	Max. Moment		Steel Section	
	4 span 1 or 4 span 2	Pier		
D.L.	525.7	-1153.2		
	Max. Moment		Comp. Section	
	4 span 1 or 4 span 2	Pier		
S.D.L.	231.0	-330.7		
L.L.	627.6	-471.4		
Imp.	144.3	-108.4		
Total	1002.9	-910.5		
	Shear		Comp. Section	
	1 Brg. Abut.	3 sp. 1 or 3 sp. 2	1 Brg. Abut.	3 sp. 1 or 3 sp. 2
S.D.L.	13.9	3.0	-3.6	-10.2
L.L.	34.6	21.0	-18.2	-26.7
Imp.	8.0	4.8	-4.2	-6.2
Total	55.5	28.8	-26.1	-43.1
	Reaction			
	1 Brg. No. Abut.	1 Brg. Pier		
D.L.	32.1	112.7		
S.D.L.	12.9	40.2		
L.L.	34.6	53.3		
Imp.	8.0	12.2		
Total	87.6	218.4		

Moments are in Ft.-kips.
Reactions and shears are in kips.

NOTES:

For details of AWS joint designations refer to AWS D2.0-66.
Contact surfaces of splices shall be free of oil and paint.
Work this sheet with sheets 74-5

TOP OF WEB ELEVATIONS

(For Fabrication Only)

Location	G-1	G-2	G-3	G-4
4 Brg. So. Abut.	740.55	740.95	740.95	740.82
4 Splice 1	741.14	741.25	741.25	741.12
4 Brg. Pier	741.10	741.21	741.21	741.10
4 Splice 2	741.06	741.17	741.17	741.07
1 Brg. No. Abut.	740.22	740.65	740.67	740.58

DESIGNED	S. Lin
CHECKED	J. Kessler
DRAWN	P.G. Barnett
CHECKED	G.M. S.D.

Dec 16 1965

EXAMINED
PASSED
APPROVED

W.E. Beaman
V.E. Huff

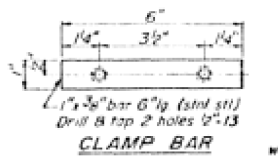
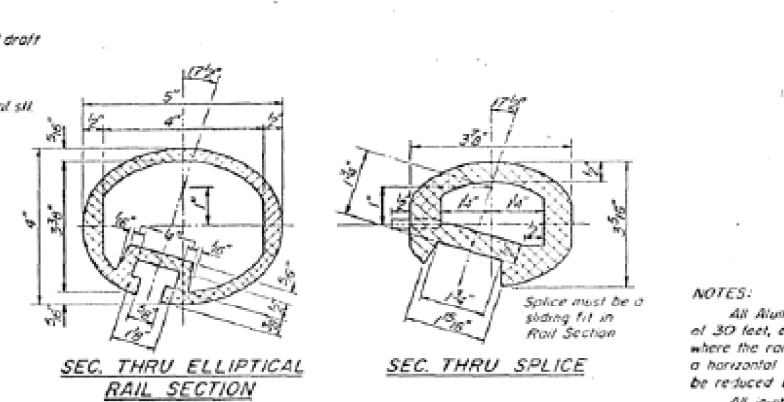
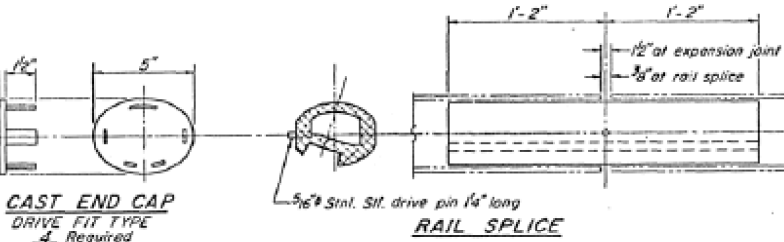
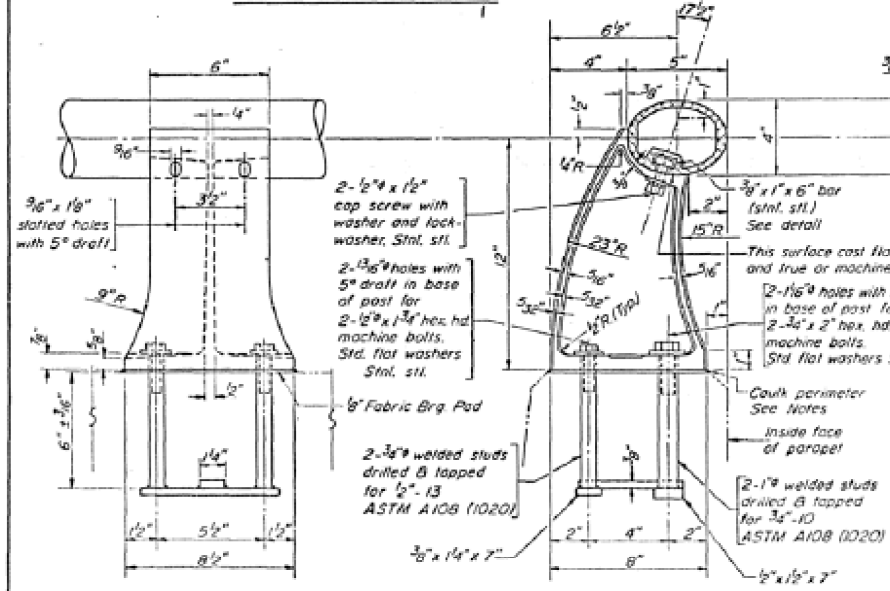
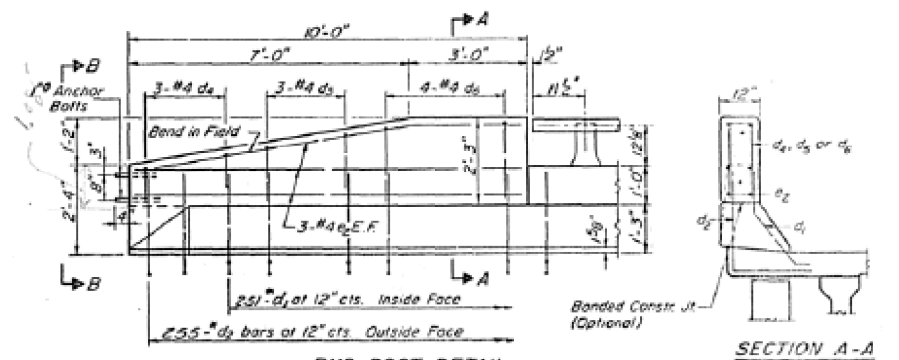
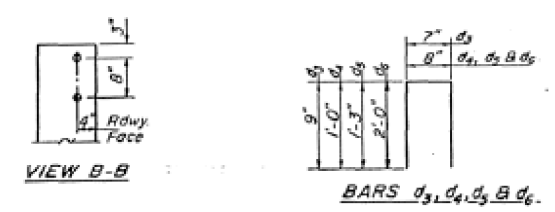
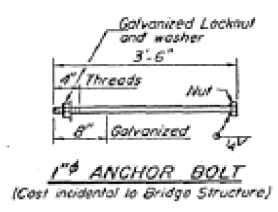
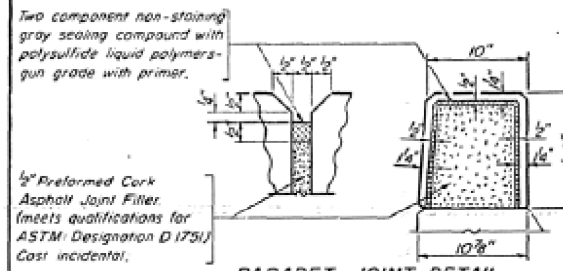
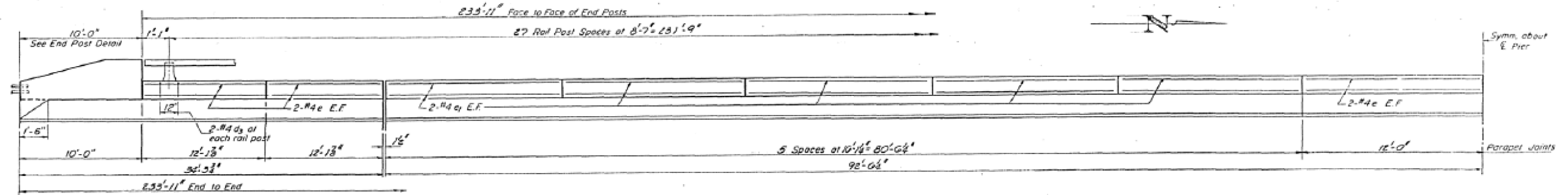
I-2-B 9-1-65

STRUCTURAL STEEL DETAILS
F.A.I. RT. 74 SEC. 74-2HB
PIATT COUNTY
STATION 1007+69.76

AS-BUILT PLANS FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PROJECT NO.	74-218	PIATT	37	19	SHEET NO. 10
					15 SHEETS



NOTES:
All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.
All joints in rail shall be spliced per detail.
Provide 1-8" and 2-1/2" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.
Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.
Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

**PARAPETS & RAILS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d_3	112	#4	2'-1"	□
d_4	12	#4	2'-5"	□
d_5	12	#4	3'-2"	□
d_6	10	#4	4'-0"	□
e	28	#2	11'-9"	—
e_1	80	#2	13'-9"	—
e_2	24	#4	9'-9"	—
Reinforcement Bars		Lbs	10.30	
Class X Concrete		Cu Yds	12.8	
Aluminum Railing		Lin Ft	467	

**PARAPET DETAILS AND
ALUMINUM RAILING**
F.A.I. RT. 74 SEC. 74-2HB
PIATT COUNTY
STA. 1007 + 69.76

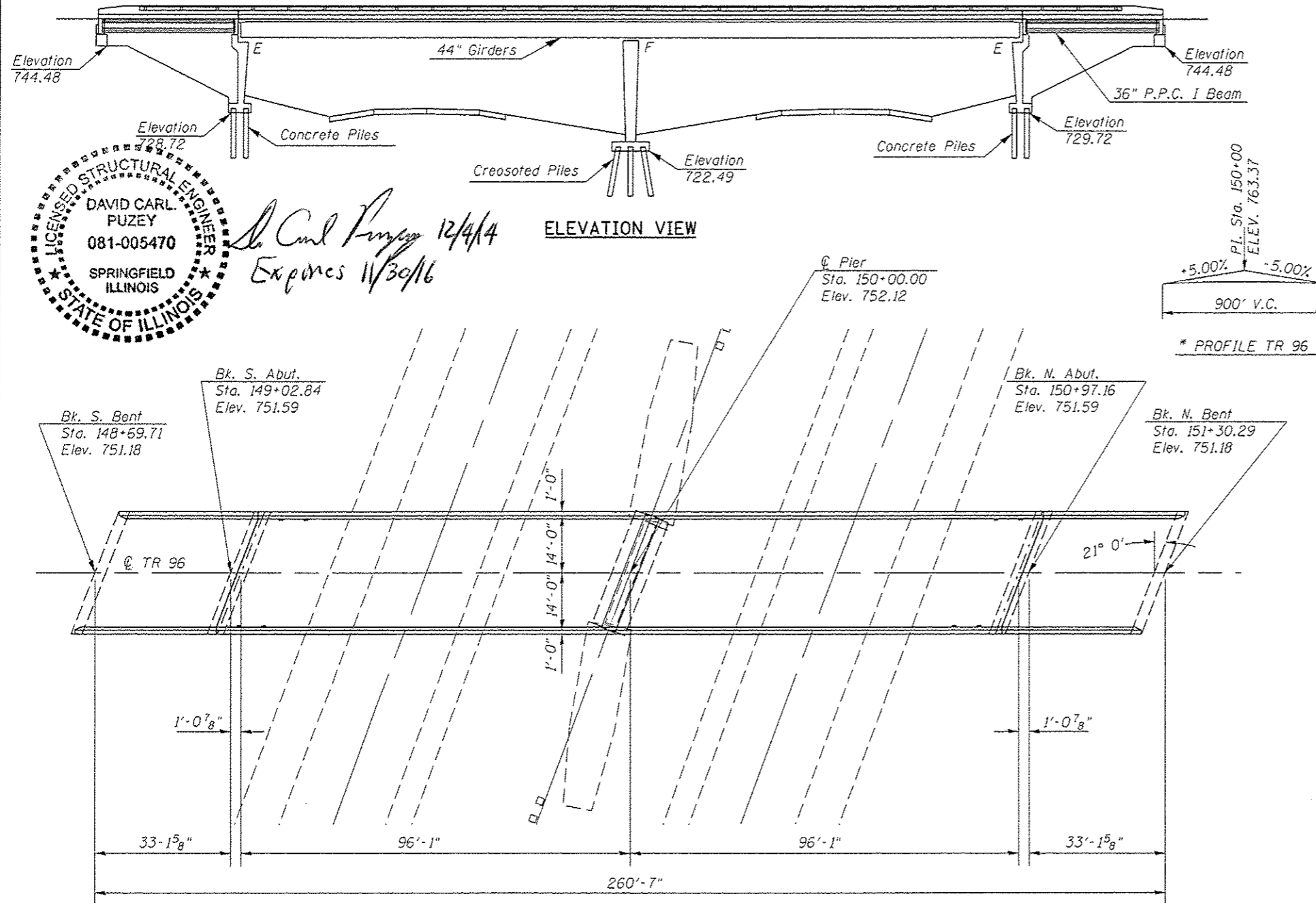
DESIGNED: S. Lin
CHECKED: Mike McNeil
DRAWN: JAF
CHECKED: G.M. S.C.

EXAMINED: Dec. 16, 1968
PASSED: H.E. Byrnes
APPROVED: J.E. Staff

Structure 074-0041 was built in 1970 as FAI 74 (EB), Section 74-3HB at Station 1114+13.97 by the State of Illinois in Piatt County. The structure consists of two approach spans of 32'-7 $\frac{1}{4}$ " and two main spans of 96'-1". The main spans of the structure consist of a 91'-7" reinforced concrete deck on 48" steel girders. The approach spans of the structure consist of a 7 $\frac{1}{2}$ " reinforced concrete deck on 36" PPC I-Beams. The spans are on a creosoted pile supported pier and concrete pile and creosoted pile supported abutments.

The structure has a back to back of approach length of 260'-7", an out to out width of 30'-0", and a face to face of parapet width of 28'-0". The structure is skewed 21°-00' left forward.

Method of Construction: ROAD CLOSURE



PROPOSED WORK

1. Perform Full-Depth Patching at Drains.
2. Place new Floor Drains.
3. Replace Existing Bearings with Elastomeric Bearings at Abutments.
4. Removal of Existing Preformed Joint Sealer.
5. Place Silicone Joint Sealer.
6. Construct Wingwall Extensions.
7. Construct Crashwall Extension.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU YD	0.5
FLOOR DRAINS	EACH	4.0
CONCRETE STRUCTURES	CU YD	3.9
CONCRETE SUPERSTRUCTURE	CU YD	1.1
PROTECTIVE COAT	SQ YD	24.0
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1,460.0
REINFORCEMENT BARS, EPOXY COATED	POUND	840.0
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	8.0
ANCHOR BOLTS, 1"	EACH	16.0
JACK AND REMOVE EXISTING BEARINGS	EACH	8.0
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	2.8
SILICONE JOINT SEALER, 1.50"	FOOT	64.0

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction 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 work. However, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Joint openings shall be adjusted according to article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.

If the analysis submitted to the Contractor for the Jacking/Temporary support system to be used shows temporary stiffeners are required to prevent web crippling or buckling, the stiffeners shall be steel and bolted to the web. If the stiffeners are not required, hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation.

Reinforcement bars designated (E) shall be epoxy coated.



David Carl Puzey 12/4/14
Expires 11/30/16

* AS-BUILT INFORMATION

PLAN VIEW

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

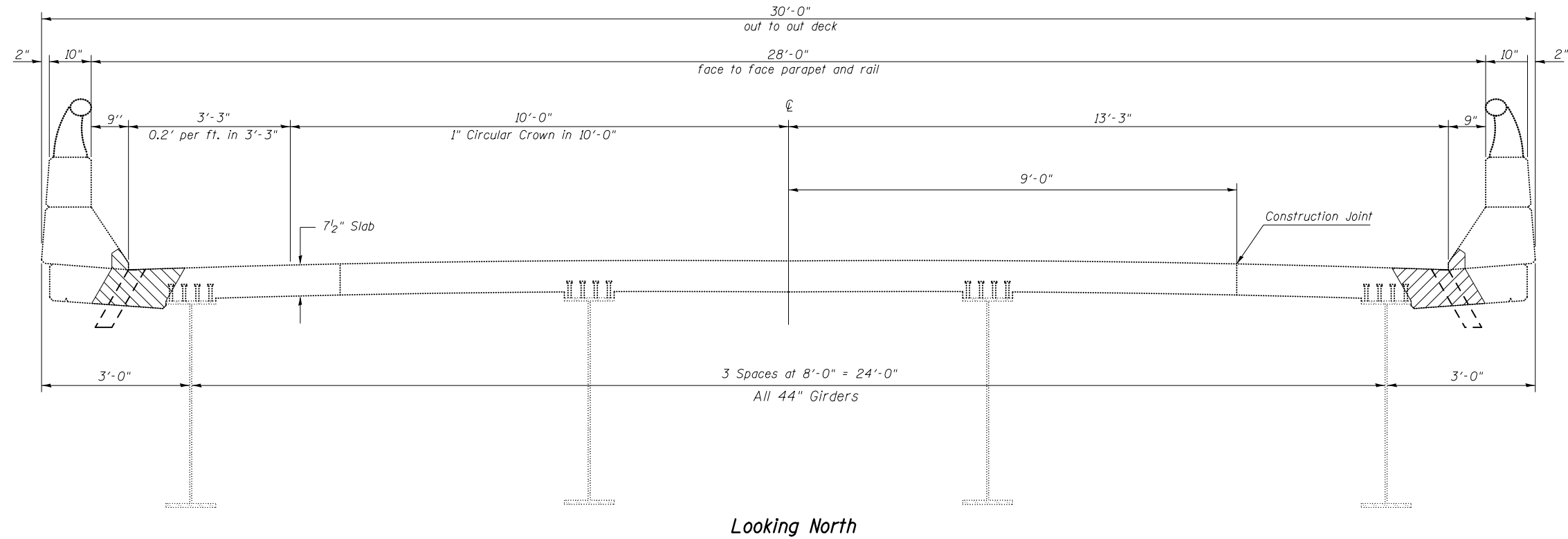
GENERAL PLAN AND ELEVATION
S.N. 074-0041

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	161
CONTRACT NO. 70717			ILLINOIS FED. AID PROJECT	

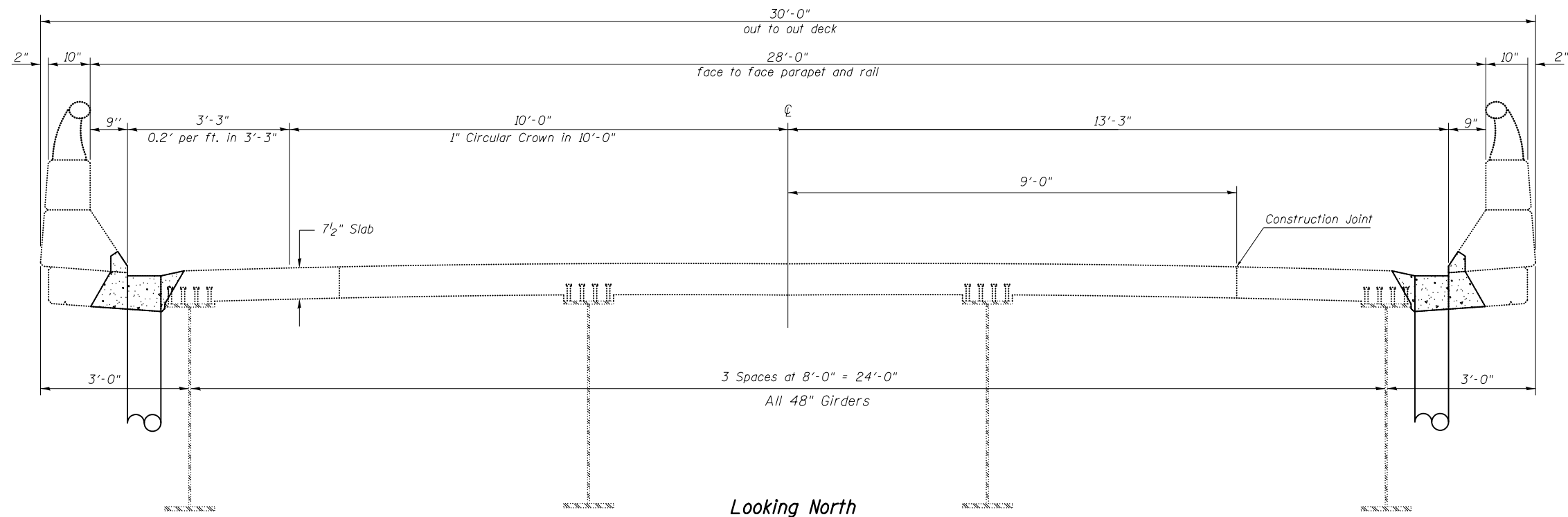
FILE NAME	USER NAME	DESIGNED	REVISED
c:\pwork\dwidot\ea\ingl\0220193\0574	ea\ingl	ESS	-
		DRAWN	ESS
		CHECKED	TJB
		DATE	2-13-2013

SCALE: SHEET 1 OF 14 SHEETS STA. TO STA.

EXISTING CROSS SECTION



PROPOSED CROSS SECTION



FILE NAME =	USER NAME = eaglinge	DESIGNED - ESS	REVISED -
et:\pw\work\p\dot\ea\glinge\d\200193\0570	717 Structure Repair Plans-sht.dgn	DRAWN - ESS	REVISED -
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	PLOT DATE = 10/16/2014	DATE - 2-14-2013	REVISED -

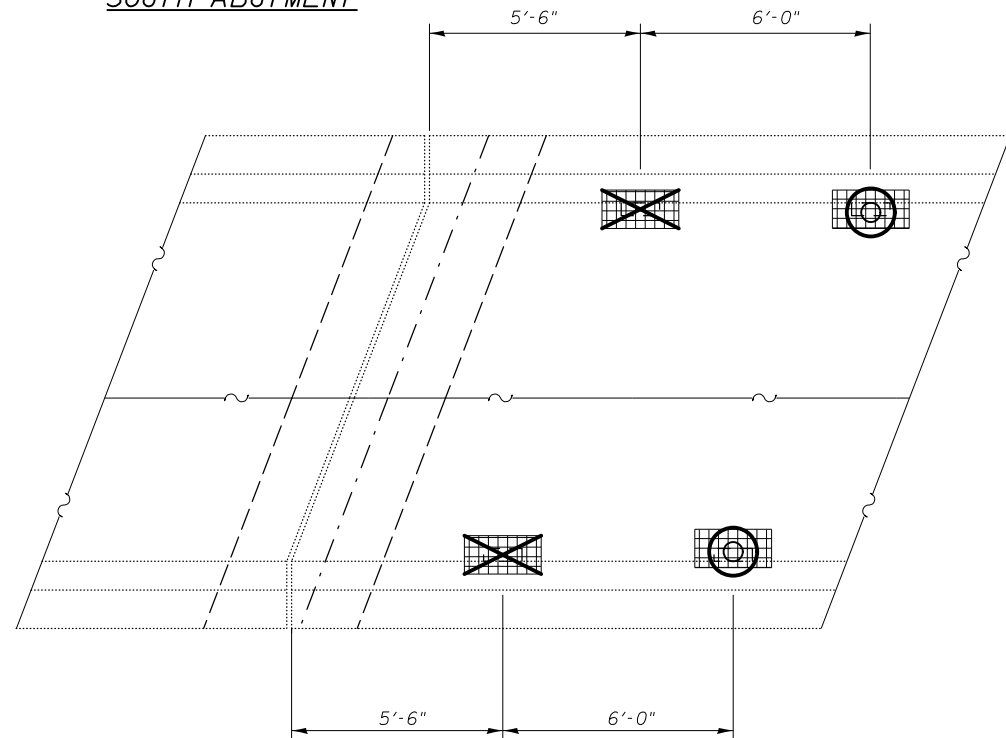
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL DECK CROSS SECTION
S.N. 074-0041**

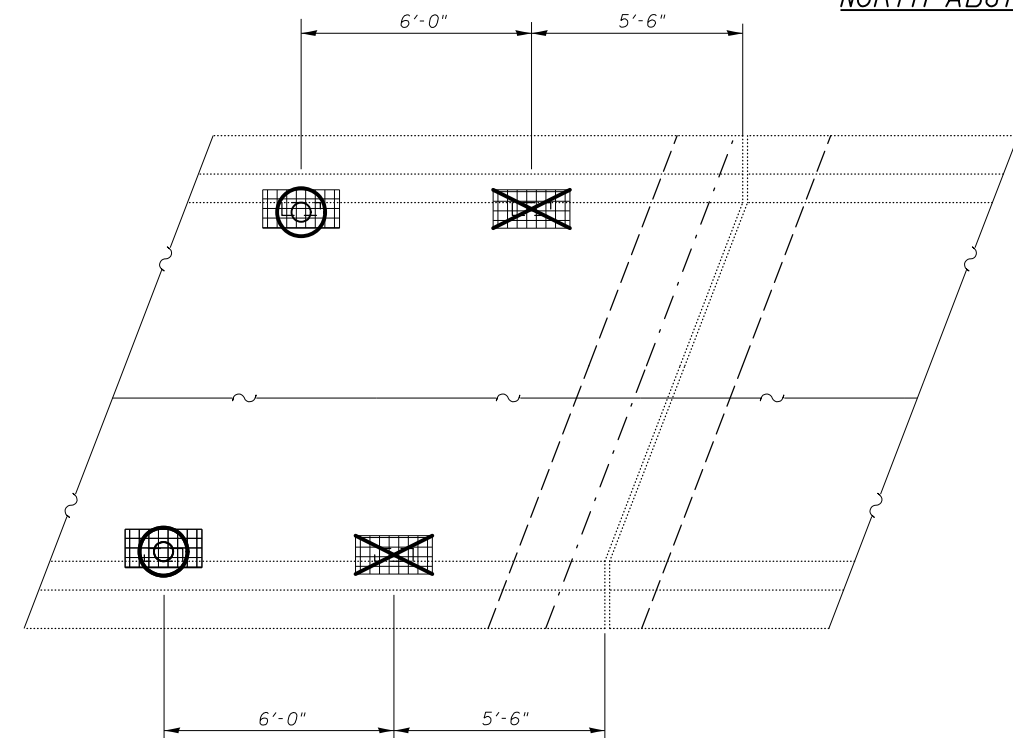
SCALE: SHEET 2 OF 14 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	162
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				

SOUTH ABUTMENT



NORTH ABUTMENT



LEGEND

Eliminate floor drain

Proposed floor drain location

Deck Slab Repair (Full Depth, Type I) at all Drain Locations. All repair areas are 2'-0" x 1'-7" minimum unless otherwise determined by the Engineer.

NOTES:

Patch sizes shown represent conditions at the time the plans were completed. The actual sizes and locations of patching shall be determined by the engineer. The Engineer shall show the actual locations of the deck repairs on this sheet.

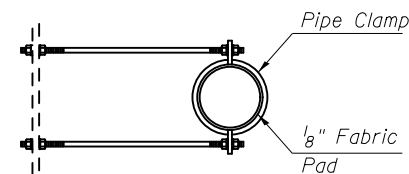
The existing drains and extensions shall be removed. Cost included with "Deck Slab Repair (Full Depth, Type I)".

Extreme care must be used when removing concrete near the top flange of the plate girder. The contractor is responsible for any damage to the plate girder.

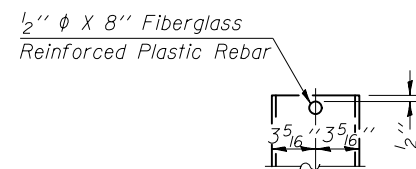
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Society of Protective Coatings' Spec. SSPC-SP1 prior to painting. Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress OF 30,000 P.S.I. minimum. Galvanize clamping device according to AASHTO M232. Cost of clamping device and galvanizing included with Floor Drains.

BILL OF MATERIAL

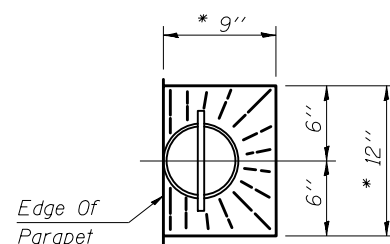
ITEM	UNIT	QUANTITY
FLOOR DRAINS	EACH	4.0
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	2.8



TOP PLAN
Drain Clamp

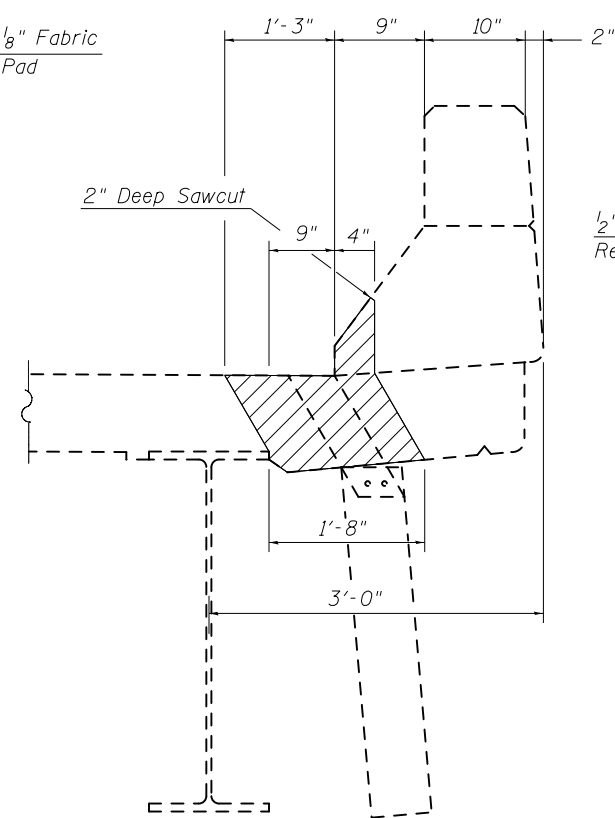


FIBERGLASS PIPE

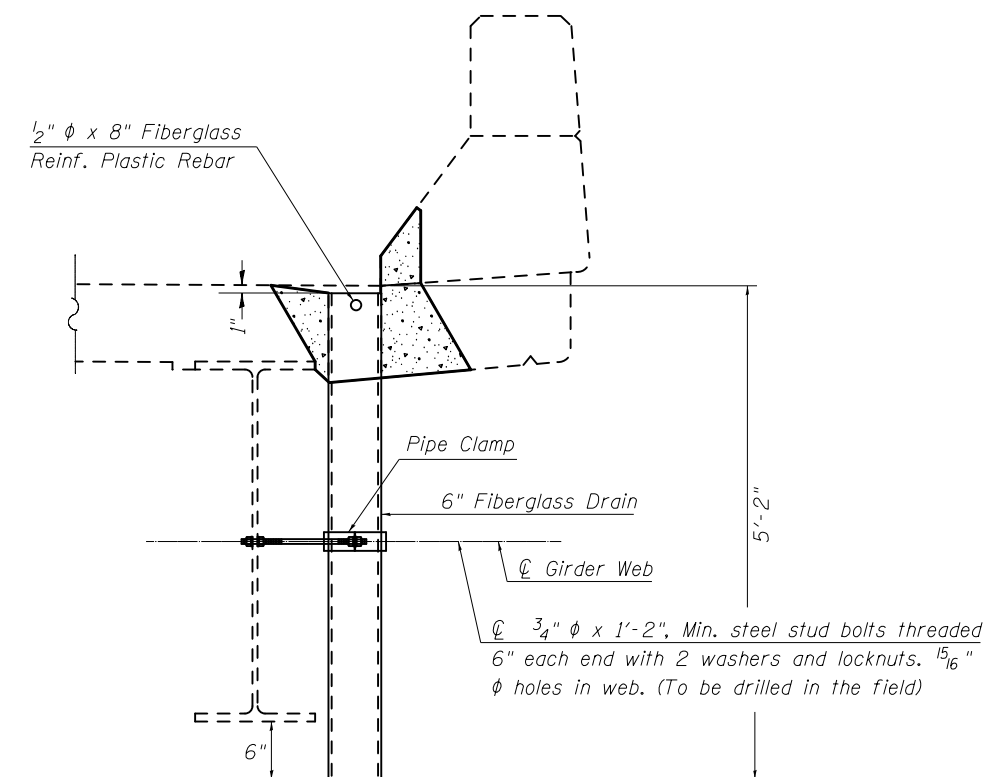


TOP PLAN

* SLOPE TO DRAIN



EXISTING
Removal Limits for Deck Slab Repair (Full-Depth, Type I) at Drain Locations



PROPOSED

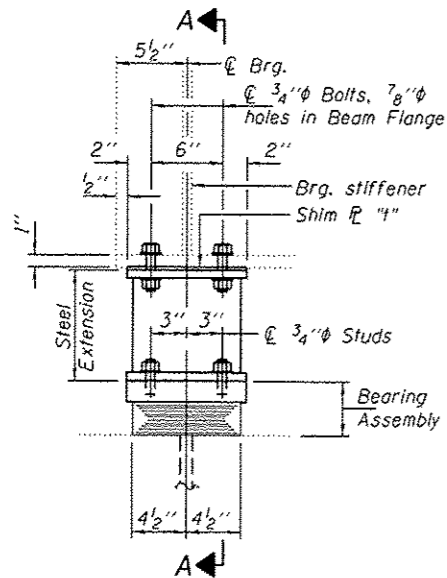
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	PLOT SCALE = 48.0000' / in.	CHECKED - TJB	REVISED -
	PLOT DATE = 10/16/2014	DATE - 2-15-2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

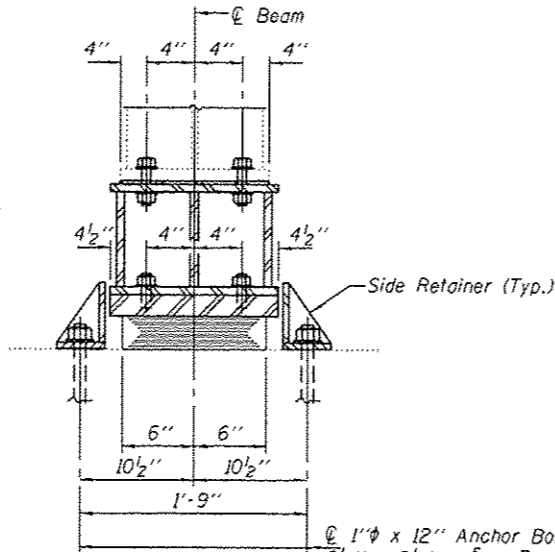
SUPERSTRUCTURE PLAN - DRAIN DETAIL
S.N. 074-0041

SCALE: SHEET 4 OF 14 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	164
CONTRACT NO. 70717			ILLINOIS FED. AID PROJECT	



ELEVATION



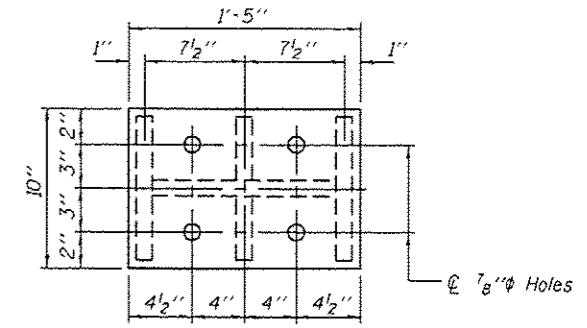
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

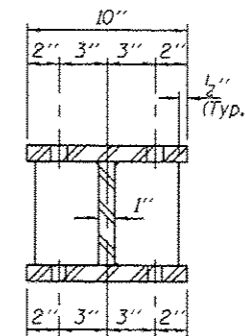
BEAM REACTIONS

RP	(K)	46.9
R ₄	(K)	34.7
Imp.	(K)	7.8
R (Total)	(K)	89.4

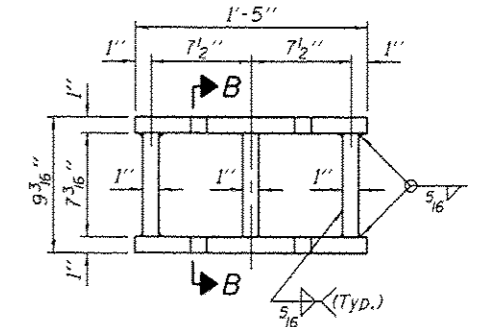
Notes:
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel. Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. Jack capacity = 52 Tons.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



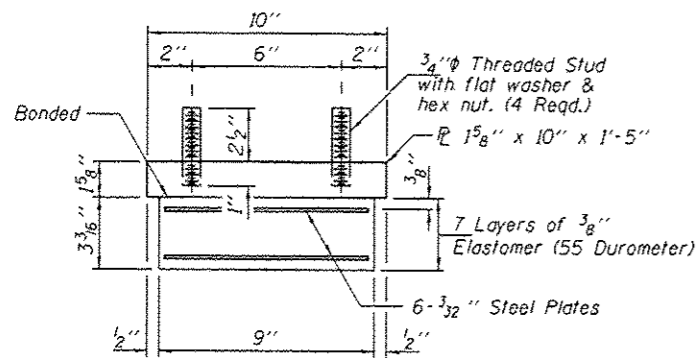
PLAN TOP AND BOTTOM PLATE



SECTION B-B



STEEL EXTENSION DETAIL

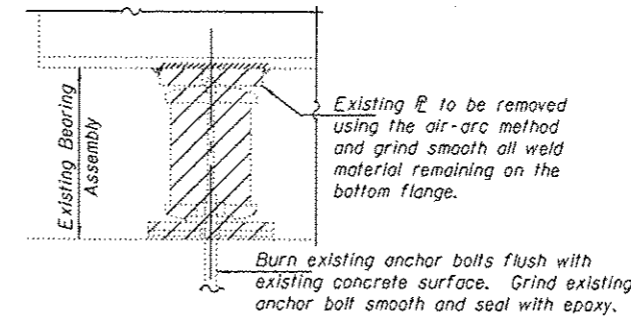


BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.

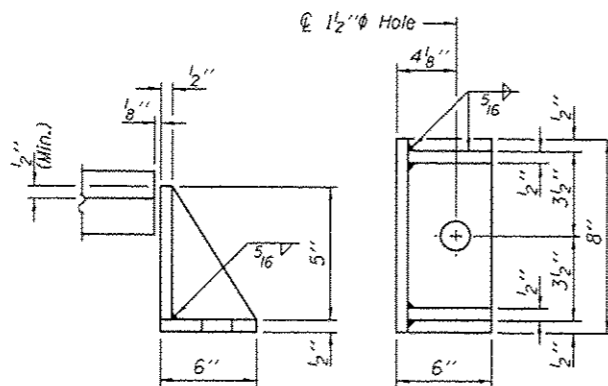
SHIM PLATE 1/4"

Location	G1	G2	G3	G4
N. Abut.	0	0	3/8"	0
S. Abut.	0	3/8"	0	0



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	8
Jack and Remove Existing Bearings	Each	8
Furnishing and Erecting Structural Steel	Pound	1460
Anchor Bolts 1"φ	Each	16

TYI/REPS 12-03-2008

DESIGNED VHV
CHECKED DAB
DRAWN baliva
CHECKED VHV DAB

EXAMINED *Timothy A. ...* DATE DECEMBER 3, 2014
PASSED *...*
ACTING ENGINEER OF STRUCTURAL SERVICES
ACTING ENGINEER OF BRIDGES AND STRUCTURES

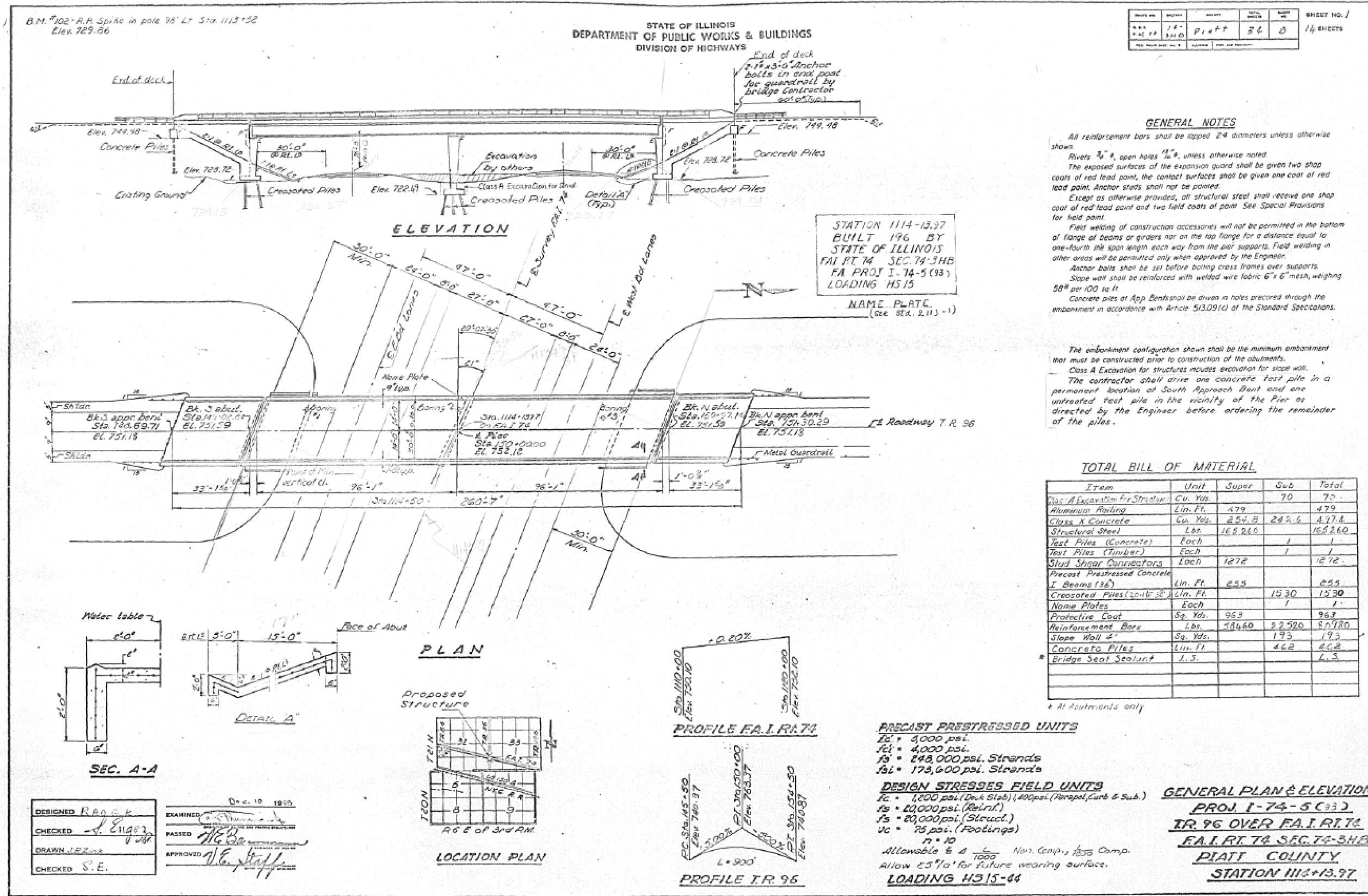
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH AND SOUTH ABUTMENT
BEARING REPLACEMENT DETAILS
SN 074-0041

SHEET NO. 7 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	167
			CONTRACT NO. 70717	
ILLINOIS FED. AID PROJECT				

AS-BUILT PLANS FOR INFORMATION ONLY



PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
74	(74-2)RS-2 & (74-3)RS-3	34	14 SHEETS

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Rivets $\frac{3}{8}$ " ϕ , open holes $\frac{3}{8}$ " ϕ , unless otherwise noted.

The exposed surfaces of the expansion guard shall be given two shop coats of red lead paint, the contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions for field paint.

Field welding of construction accessories will not be permitted in the bottom of flange of beams or girders nor on 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.

Anchor bolts shall be set before bolting cross frames over supports.

Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58# per 100 sq ft.

Concrete piles of App. Bent shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specifications.

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

Class A Excavation for structures includes excavation for slope wall.

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

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Class A Excavation for Structure	Cu. Yds.		70	70
Aluminum Railing	Lin. Ft.	479		479
Class X Concrete	Cu. Yds.	255.8	242.6	498.4
Structural Steel	Lbs.	165,260		165,260
Test Piles (Concrete)	Each		1	1
Test Piles (Timber)	Each		1	1
Stud Shear Connectors	Each	1872		1872
Precast Prestressed Concrete I Beams (36)	Lin. Ft.	255		255
Crested Piles (20" x 20")	Lin. Ft.		1530	1530
Name Plates	Each		1	1
Protective Coat	Sq. Yds.	963		963
Reinforcement Bars	Lbs.	28460	22520	50980
Slope Wall #2	Sq. Yds.		173	173
Concrete Piles	Lin. Ft.		462	462
Bridge Seat Sealant	L.S.			1.5

* At Abutments only

PRECAST PRESTRESSED UNITS

Ic = 3,000 psi.
 Ic = 4,000 psi.
 Is = 248,000 psi. Strands
 Is = 179,600 psi. Strands

DESIGN STRESSES FIELD UNITS

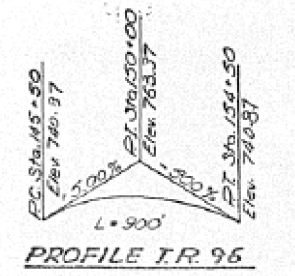
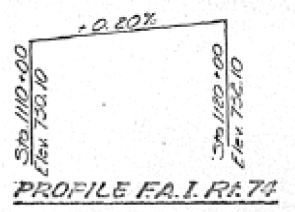
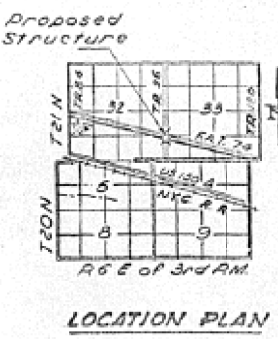
Ic = 1,200 psi. (Deck Slab) / 400 psi. (Parapet, Curb & Sub.)
 Is = 20,000 psi. (Reinf.)
 Is = 20,000 psi. (Struct.)
 Uc = 75 psi. (Footings)
 n = 10
 Allowable $\frac{E_s}{E_c} \frac{L}{1000}$ Non. Comp. $\frac{1}{1000}$ Comp.
 Allow 25% for future wearing surface.
LOADING HS 15-44

GENERAL PLAN & ELEVATION

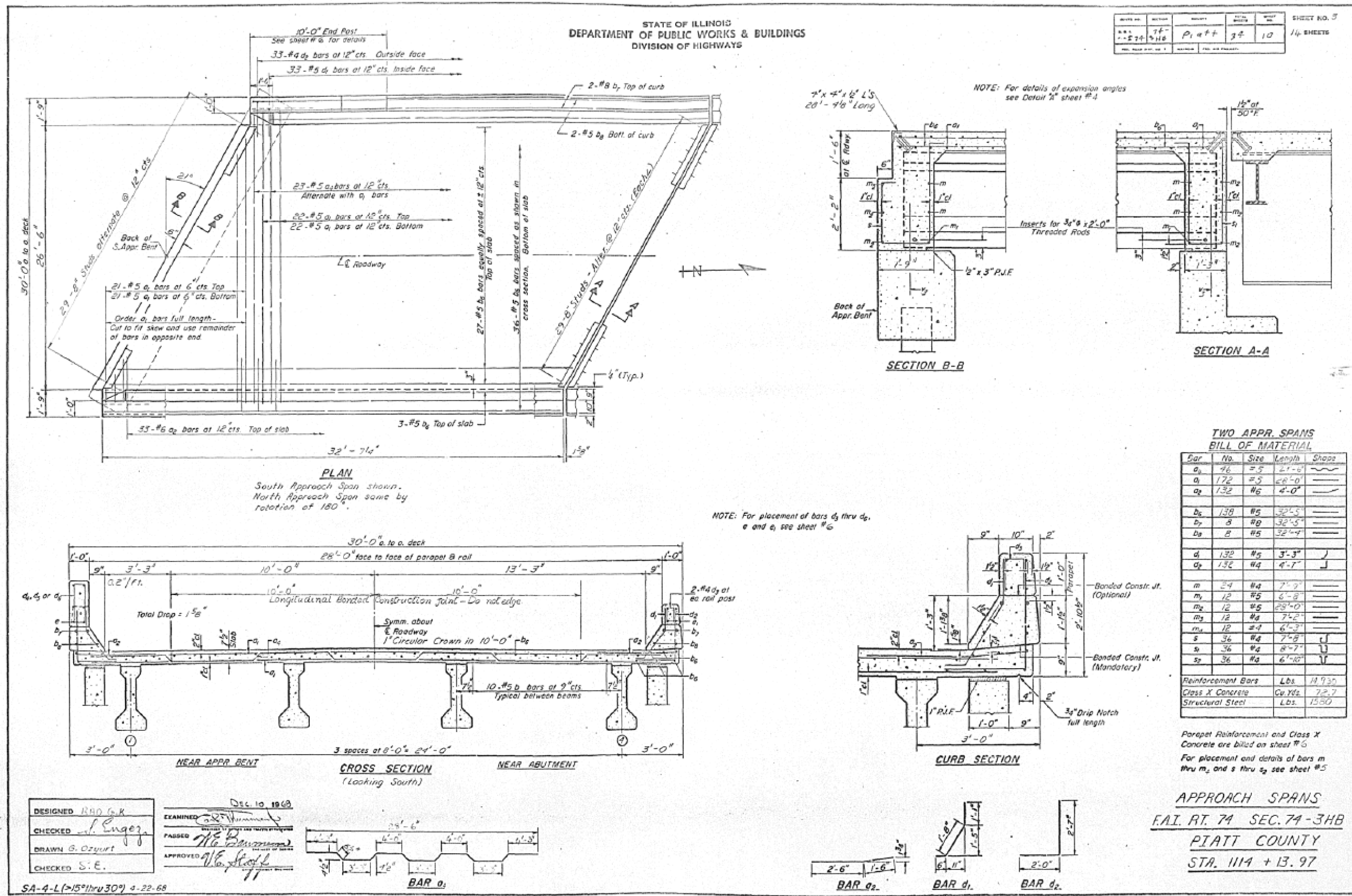
PROJ. I-74-5 (93)
TR. 96 OVER F.A.I. R.T. 74
F.A.I. R.T. 74 SEC. 74-3HB
PIATT COUNTY
STATION 1116+13.97

DESIGNED RAG:ek
 CHECKED J. Enger
 DRAWN J.E.Zok
 CHECKED S.E.

EXAMINED
 PASSED
 APPROVED



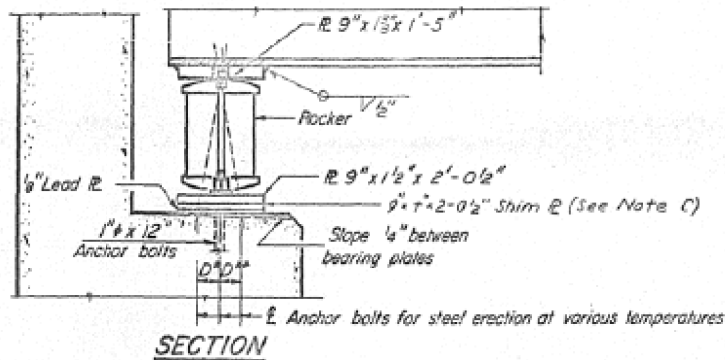
AS-BUILT PLANS FOR INFORMATION ONLY



AS-BUILT PLANS FOR INFORMATION ONLY

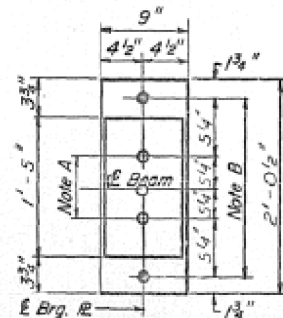
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 8	14 SHEETS
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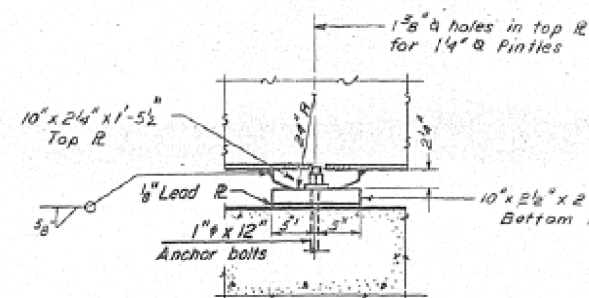
SECTION

Note C:
 c = 3/8" @ Girder-2 South Abut
 c = 3/8" @ Girder-3 North Abut
 c = 5/8" @ ALL other Bearings

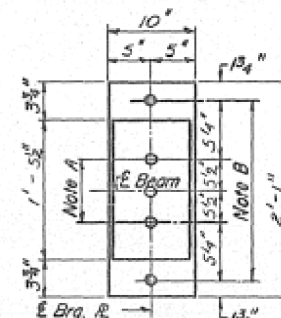


**PLAN
AT ABUTMENT**

NOTE A
 1 1/2" Holes - 1" deep in top R
 for pintles. Thread or press fit
 pintles into bottom R.

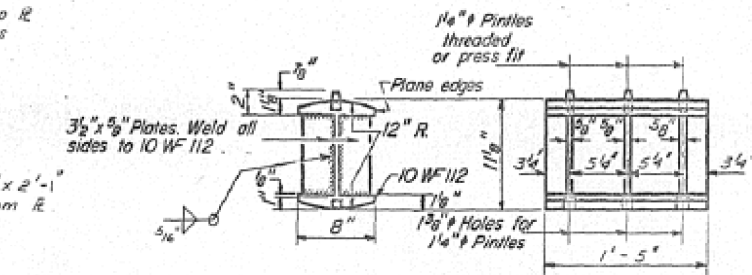


ELEVATION

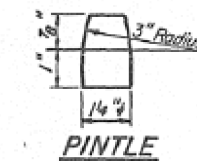


**PLAN
AT PIER**

NOTE B
 1 1/2" Holes for 1 1/4" anchor bolts.
 2 1/2" x 2 1/2" x 1/8" R. Washers
 under nut.



ROCKER



PINTLE

BEARING ASSEMBLY DETAILS

STRESS TABLES

TABLE OF MOMENTS, REACTIONS AND SHEARS - INTERIOR BEAMS					
MOMENTS			REACTIONS		
D.L	STEEL SECTION		D.L	Pier	Abut.
	.4 Spdn 1	STEEL SECTION			
	537.3		1742.5	16.9	166.3
S.D.L	COMPOSITE SEC.		L.L	IMP	TOTAL
	S.D.L	COMPOSITE SEC.			
	265.6		538.0	34.7	55.5
	658.0		121.7	7.8	12.5
	147.8				
TOTAL	1608.7		2102.2	89.4	234.3

SHEAR				
S.D.L	Abut.	4 Point		
		1/4 Point	1/2 Point	3/4 Point
	14.4	5.0	4.3	13.6
	34.7	23.1	4.2	29.0
	7.8	3.3	18.6	6.5
TOTAL	56.9	33.4	27.1	49.1

Moments are in Ft.-Kips
Reactions and Shears are in Kips

PROPERTIES

STEEL SECTION	
I _c	15620 in ⁴
STS	598 in ³
SBS	796 in ³
COMPOSITE SECTION	
I _c	40665 in ⁴
STC	4777 in ³
SBC	1092 in ³
STEEL SECTION@PIER	
I _s	35119 in ⁴
STs	1471 in ³
SBs	1471 in ³

**TOP OF WEB ELEVATIONS
(For Fabrication only)**

	GIRDER-1	GIRDER-2	GIRDER-3	GIRDER-4
E Brg. S. Abut.	750.75	750.69	750.92	750.85
E Splice A	751.26	751.87	751.37	751.26
E Brg. Pier	751.22	751.33	751.33	751.22
E Splice B	751.26	751.37	751.37	751.26
E Brg. N. Abut.	750.85	750.92	750.89	750.75

BEARING DETAILS
 F.A.I. RT. 74 SEC. 74-3HB
 PIATT COUNTY
 STA. 1114 + 13.97

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

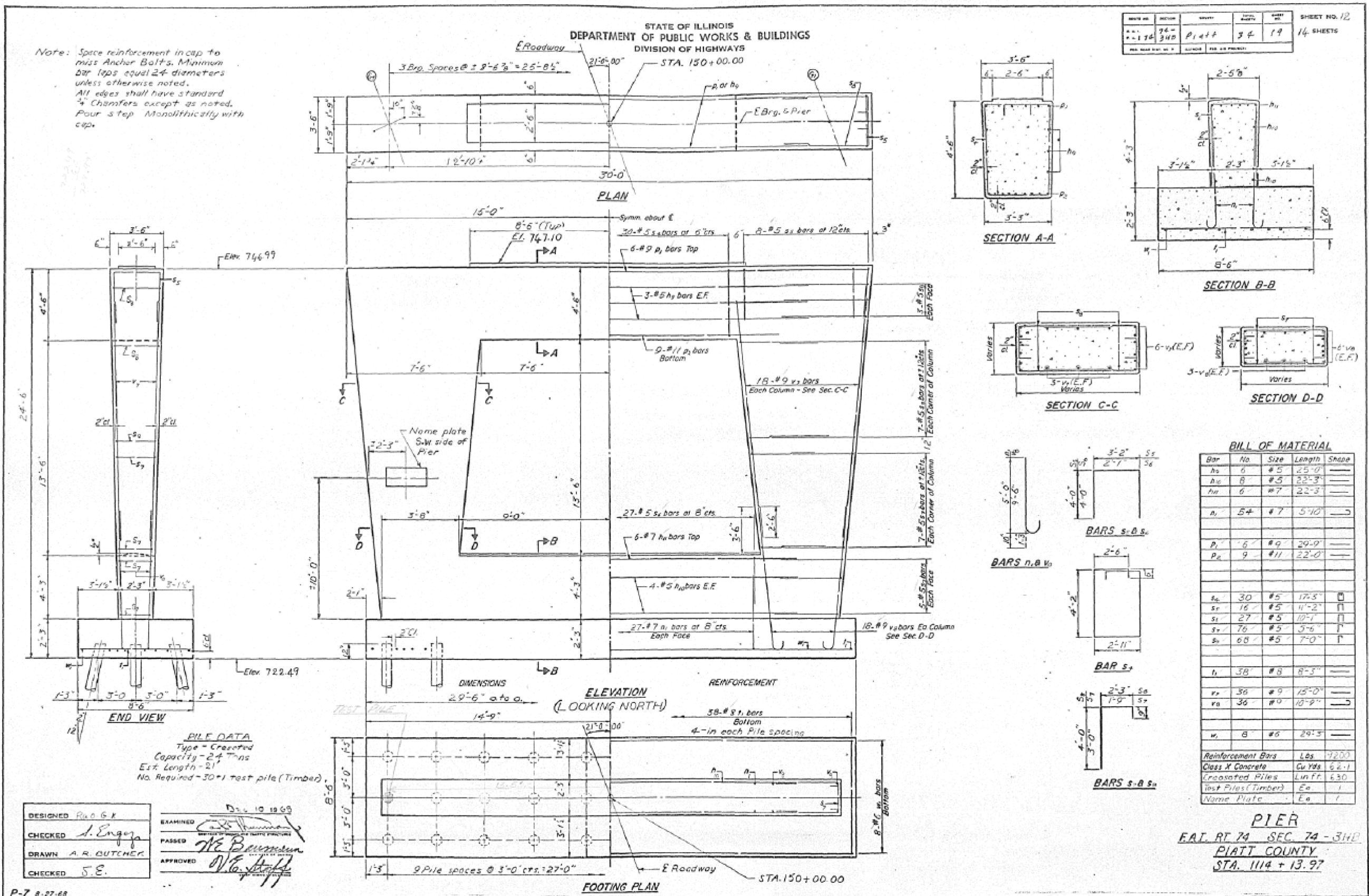
- a) D* (Side of brg. away from fixed brg.)
 D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
 D** (Side of brg. toward fixed brg.)
 D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.
- b) After Girders have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All Pier anchor bolts shall be built into the masonry.

DESIGNED RAO G.K.
CHECKED J. Enger
G. Ozyurt
DRAWN P.G. Barnett
CHECKED S.E.

EXAMINED	DEC 10 1968
PASSED	
APPROVED	

I-2-B 9-1-55

AS-BUILT PLANS FOR INFORMATION ONLY



Note: Space reinforcement in cap to miss Anchor Bolts. Minimum Bar lags equal 24 diameters unless otherwise noted. All edges shall have standard 3/4" Chamfers except as noted. Pour step Monolithically with cap.

SECTION	NO.	DATE	BY	CHKD.	APP'D.
74-3	34B	11/11	JK	JK	

SHEET NO. 12
14 SHEETS

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h _o	6	#5	25'-0"	—
h _u	8	#5	22'-3"	—
h _r	6	#7	22'-3"	—
a ₁	54	#7	5'-10"	—
p ₁	6	#9	20'-0"	—
p ₂	9	#11	22'-0"	—
s _o	30	#5	17'-3"	□
s _r	16	#5	11'-2"	□
s _t	27	#5	10'-1"	□
s _r	76	#5	3'-6"	—
s _o	68	#5	7'-0"	—
t ₁	38	#8	8'-5"	—
r _r	36	#9	15'-0"	—
r _o	36	#10	10'-9"	—
w ₁	8	#6	29'-5"	—

Reinforcement Bars Lbs. 9200
Class X Concrete Cu Yds. 62.1
Crosstied Piles Lin Ft. 630
Test Piles (Timber) Ea. 1
Name Plate Ea. 1

PIER
EAL RT 74 SEC 74-34B
PIATT COUNTY
STA. 1114 + 13.97

DESIGNED R.W.G.F.
CHECKED J. Enger
DRAWN A.R. BUTCHER
CHECKED S.E.

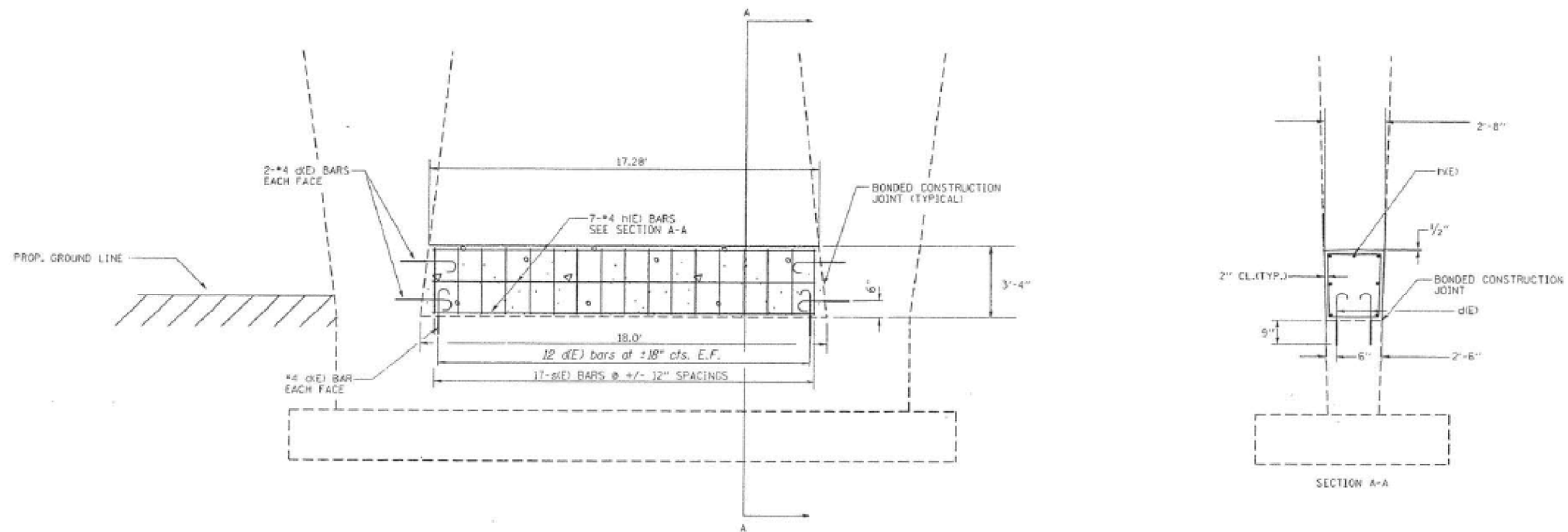
EXAMINED [Signature]
PASSED [Signature]
APPROVED [Signature]

PILE DATA
Type - Crosstied
Capacity - 24 Tons
Est. Length - 21'
No. Required - 30+1 test pile (Timber)

AS-BUILT PLANS FOR INFORMATION ONLY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2	PIATT	310	174

DETAIL OF CRASHWALL EXTENSION SN 074-0041



BILL OF MATERIALS

ITEM	UNIT	QUANTITY
Concrete Structures	Cu. Yd.	5.5
Reinforcement Bars, Epoxy Coated	Pound	253

BAR TABLE

Bar No.	Size	Length	Shape
d(E) 32	#4	2'-3"	—
h(E) 17	#4	11'-1"	□
h(E) 7	#4	15'-11"	—

	NAME	DATE	REVISIONS	
DESIGNED	D.L.P.	3-95	NAME	DATE
CHECKED	C.A.M.	4-95	D.L.P.	1-96
CADD NO.	F-3.01		J.L.D.	02-03

GENERAL NOTES:

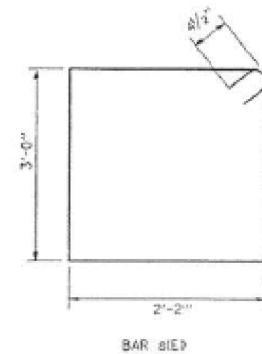
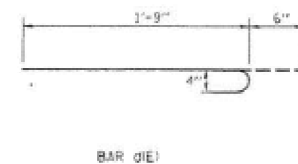
CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

EPOXY GROUTING SHALL BE DONE IN ACCORDANCE WITH ART. 584 OF THE STANDARD SPECIFICATIONS.

THE COST OF THE EPOXY GROUTING AND DRILLING SHALL BE INCLUDED IN THE COST OF REINFORCEMENT BARS, EPOXY COATED.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31, M42 OR M63 GRADE 60.

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 FOR THE WORK.



FILE NAME =	USER NAME = eaglinge	DESIGNED -	REVISED -
ct:\pw\work\p\dot\ea\linge\d0200193\0570717 Structure Repair Plans.sht.dgn		DRAWN -	REVISED -
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PLOT DATE = 10/16/2014		DATE -	REVISED -

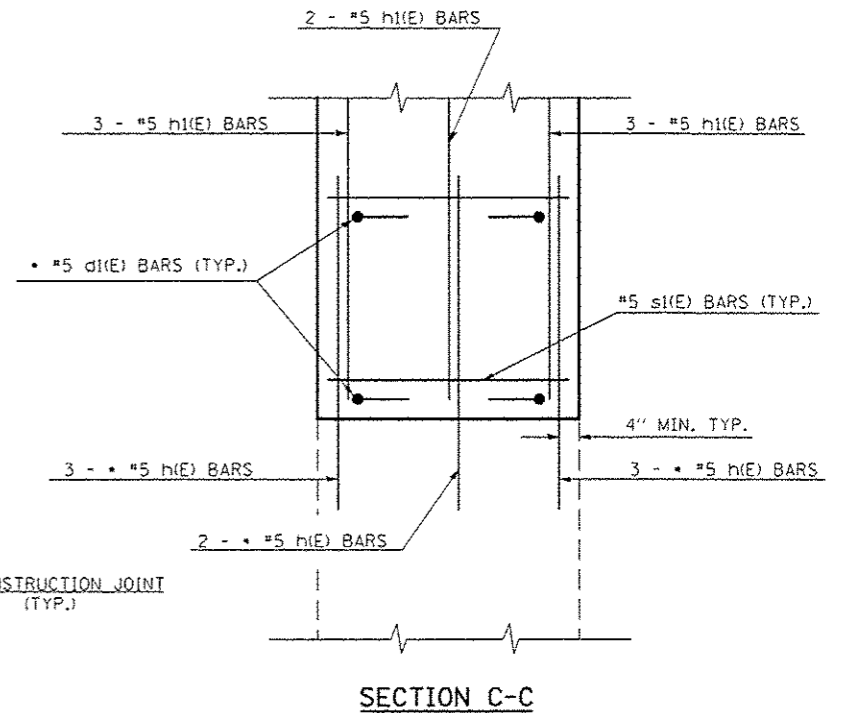
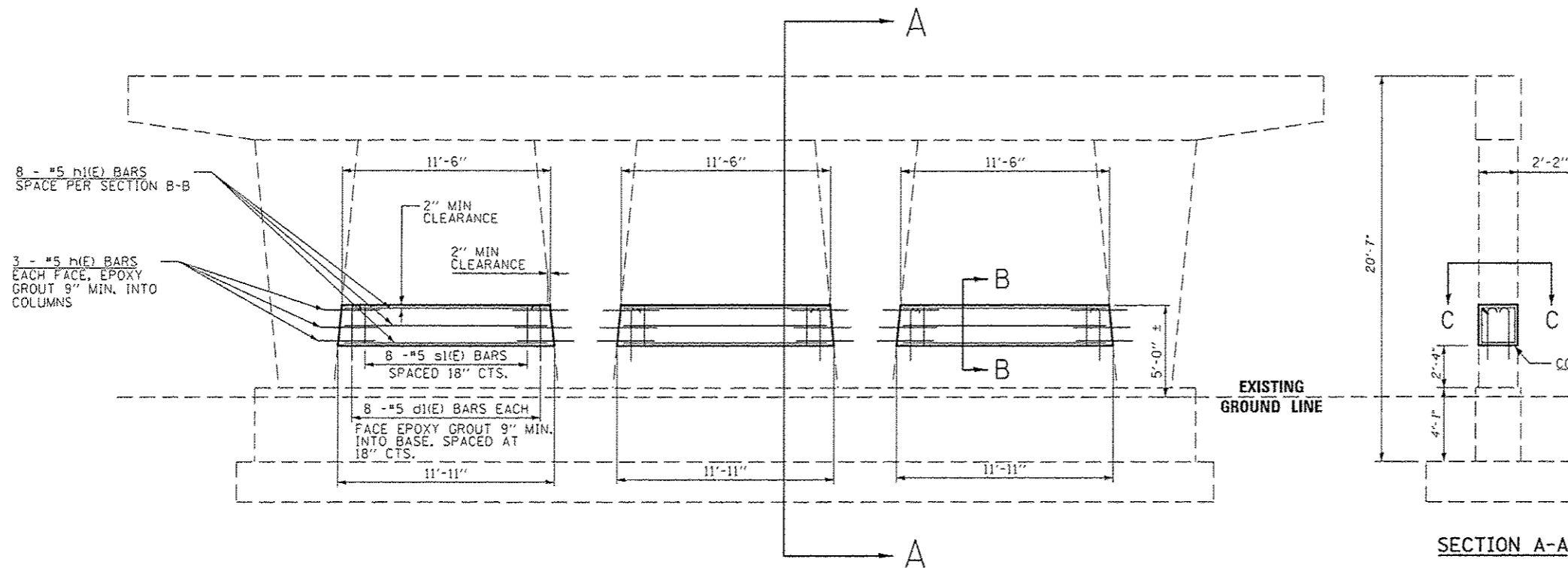
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**AS BUILT PLANS
S.N. 074-0041**

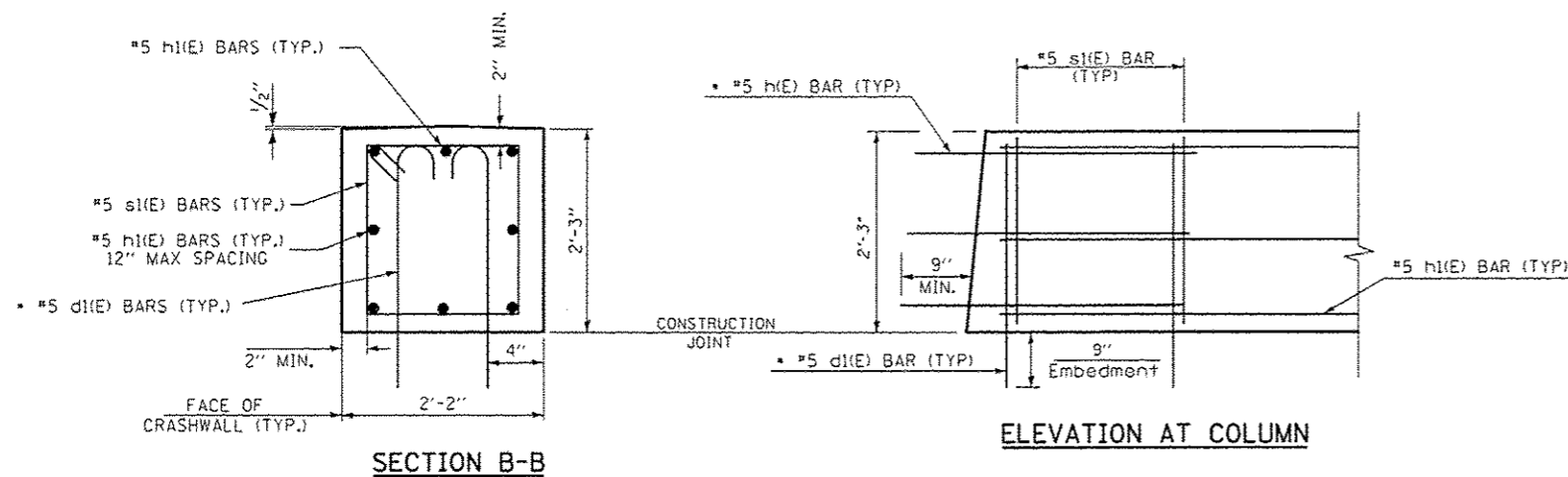
SCALE: SHEET 14 OF 14 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	174
CONTRACT NO. 70717				
ILLINOIS FED. AID PROJECT				

S.N. 074-0044 PIER CRASHWALL EXTENSION



* EPOXY GROUT BARS IN 9" MIN. HOLES ACCORDING TO ARTICLE 584 OF THE STANDARD SPECIFICATIONS.



David Carl Puzey 12/4/14 Expires 11/30/16

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION 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 WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

THE COST OF EPOXY GROUTING BARS SHALL BE INCLUDED WITH REINFORCEMENT BARS (EPOXY COATED).

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 OR GR 60. SEE SPECIAL PROVISIONS.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

** BILL OF MATERIALS

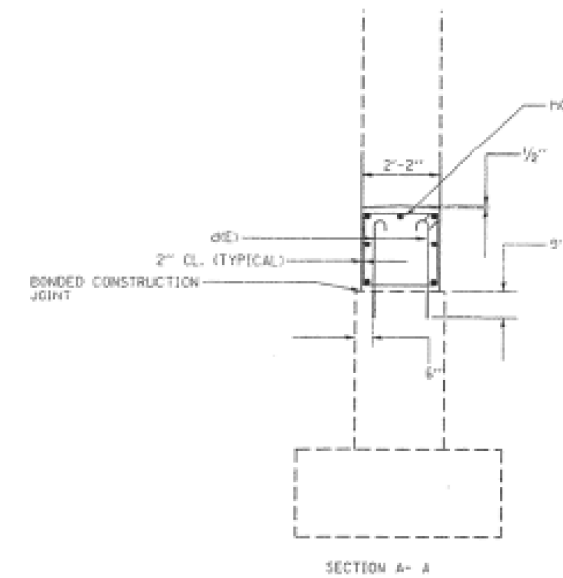
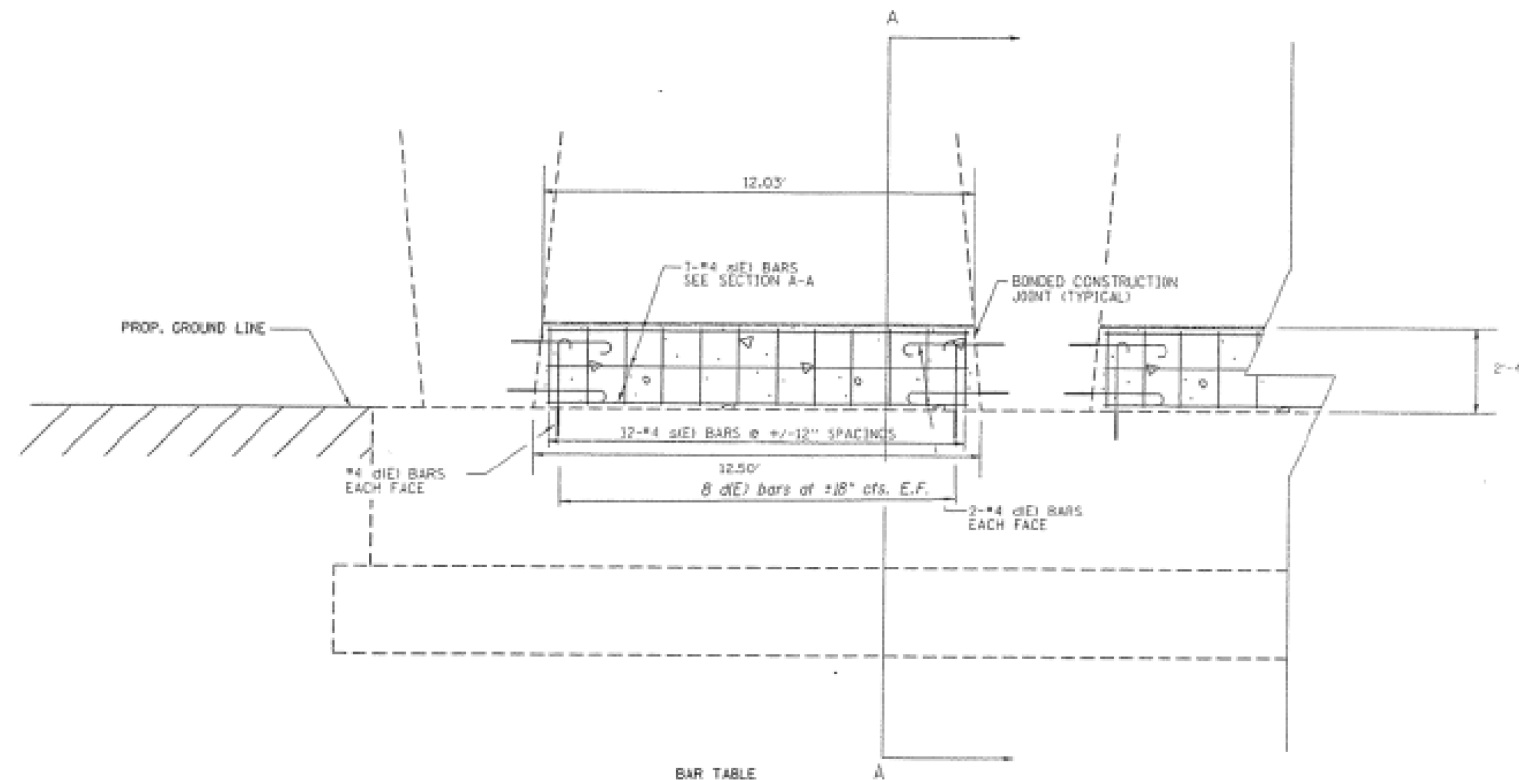
BAR	SHAPE	NO.	SIZE	LENGTH
d1(E)		48	#5	3'-5"
h(E)		48	#5	2'-9"
h1(E)		24	#5	11'-2"
s1(E)		24	#5	8'-5"
CONCRETE STRUCTURES	CU. YD.	7.4		
REINFORCEMENT BARS, EPOXY COATED	POUND	800.0		
PROTECTIVE COAT	SQ. YD.	28.0		

AS-BUILT PLANS FOR INFORMATION ONLY

DETAIL OF CRASHWALL EXTENSION SN 074-0044

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	177

* 742RS-2, 4-1-RS-1

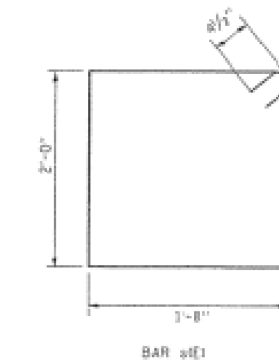
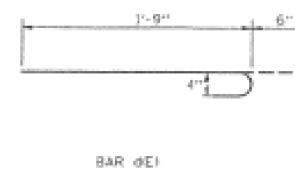


BILL OF MATERIALS

ITEM	UNIT	QUANTITY
Concrete Structures	Cu. Yd.	6.9
Reinforcement Bars, Epoxy Coated	Pound	470

BAR TABLE

Bar No.	Size	Length	Shape
dE1 72	#4	2'-3"	—
sE1 36	#4	8'-1"	□
nE1 21	#4	11'-9"	—

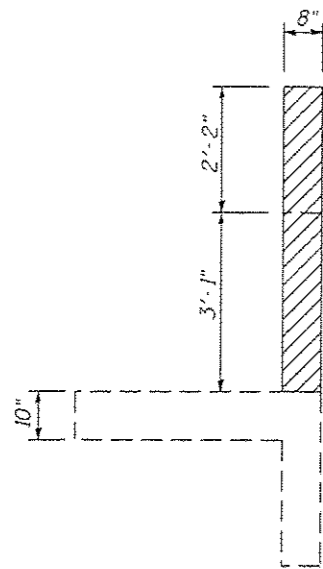


GENERAL NOTES:

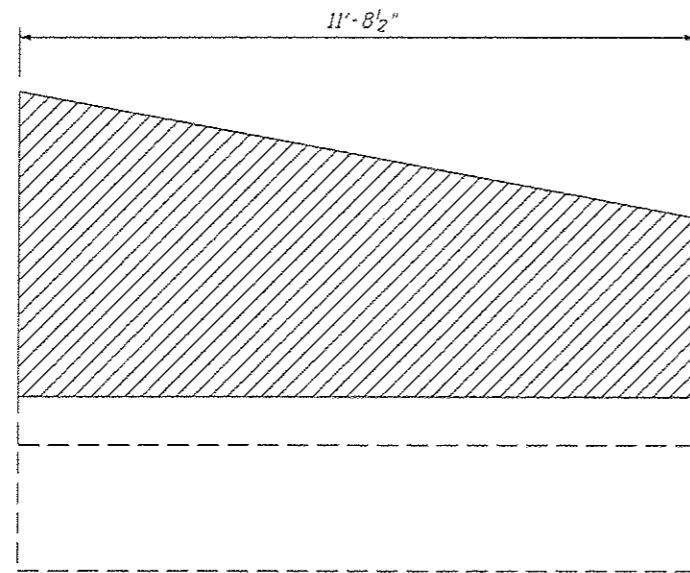
- CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
- EPOXY GROUTING SHALL BE DONE IN ACCORDANCE WITH ART. 584 OF THE STANDARD SPECIFICATIONS.
- THE COST OF THE EPOXY GROUTING AND DRILLING SHALL BE INCLUDED IN THE COST OF REINFORCEMENT BARS, EPOXY COATED.
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31, M42 OR M53 GRADE 60.
- 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 FOR THE WORK.

DESIGNED	NAME	DATE	REVISIONS
DESIGNED	D.L.P.	3-95	NAME DATE
CHECKED	G.A.M.	4-95	D.L.P. 1-96
CADD NO.	F-3.01	J.L.D.	02-03

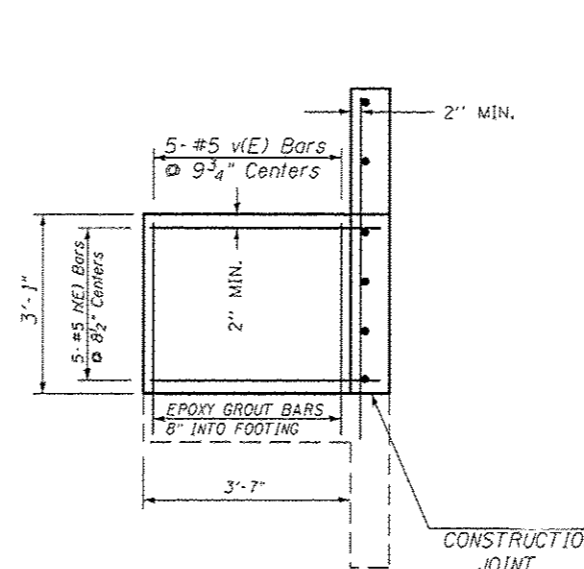
WINGWALL REPLACEMENT DETAIL



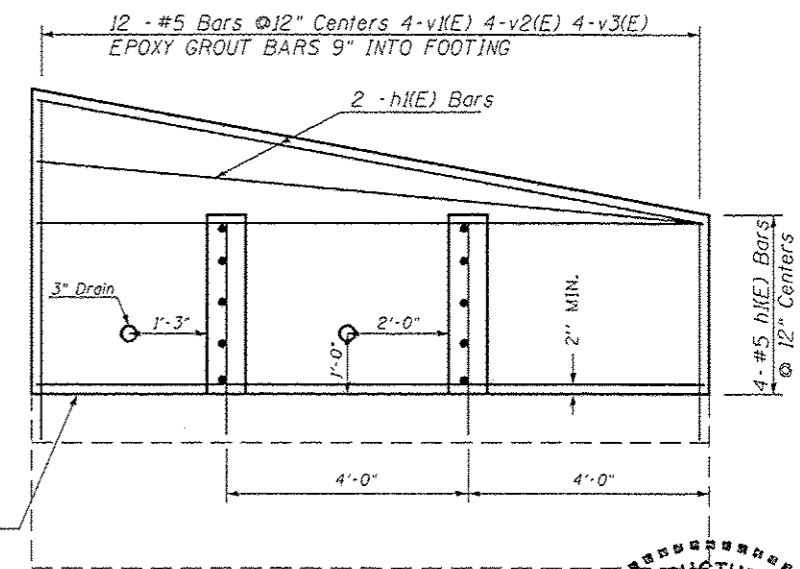
SECTION A-A



EXISTING ELEVATION

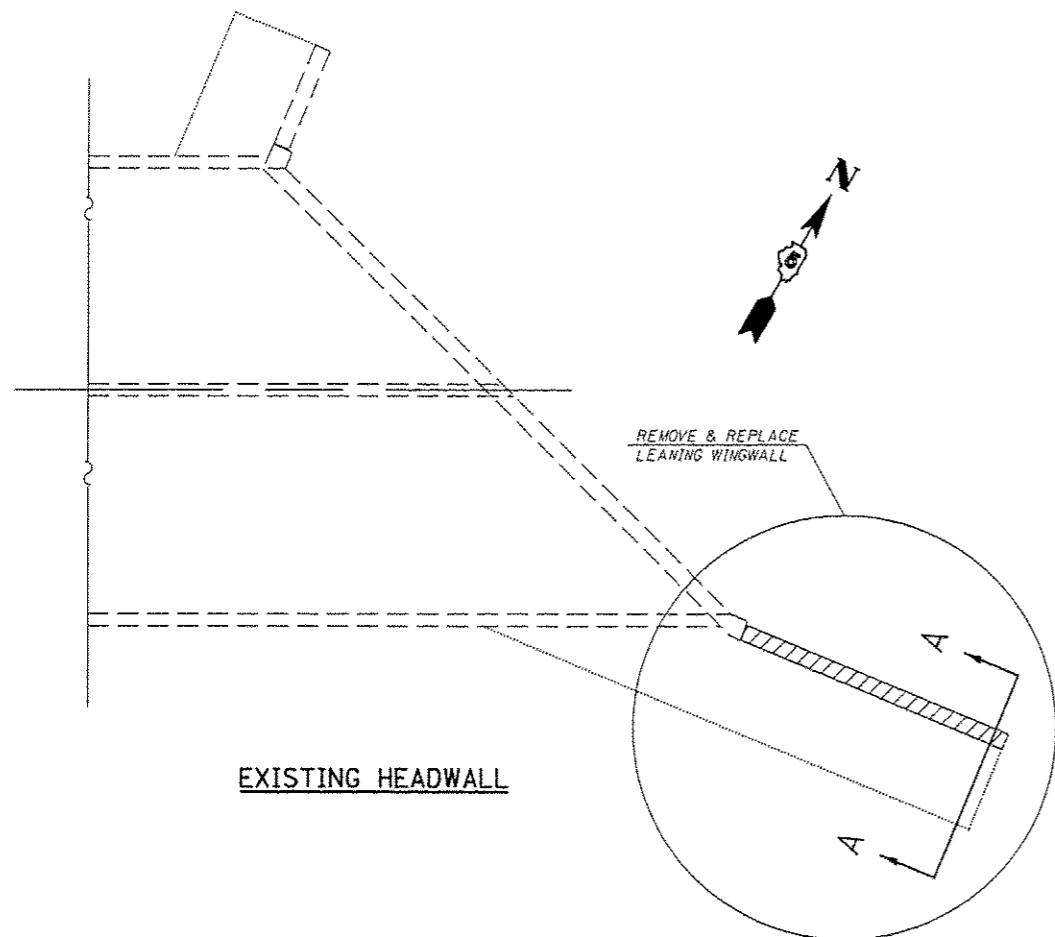


SECTION B-B

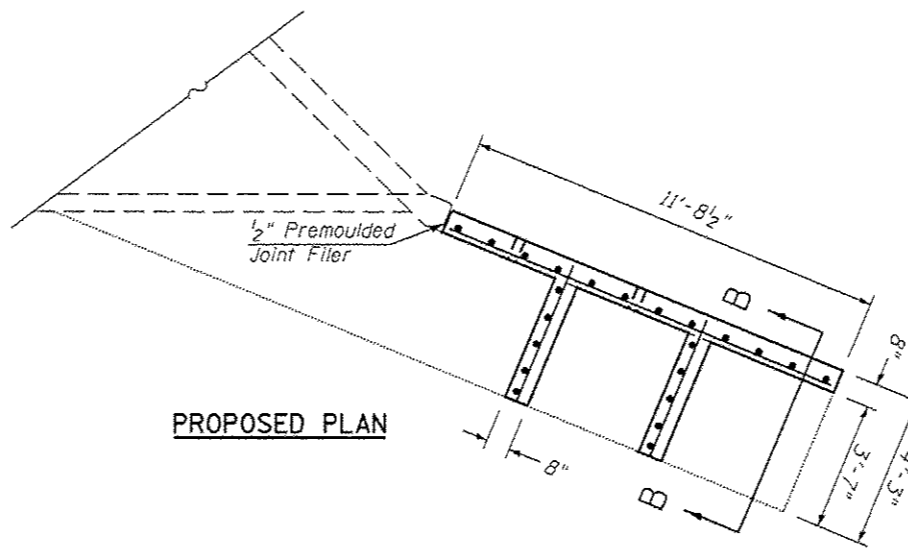


PROPOSED ELEVATION

REMOVAL LIMITS FOR CONCRETE STRUCTURES



EXISTING HEADWALL



PROPOSED PLAN

GENERAL NOTES

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 BASED UPON THE UNIT PRICE BID FOR THE WORK.

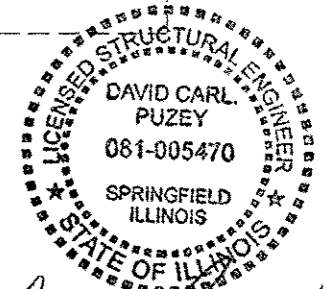
STRUCTURE EXCAVATION, PLACEMENT OF EARTHWORK, SEEDING, & MULCHING SHALL BE INCLUDED WITH CONCRETE REMOVAL & CONCRETE STRUCTURES, RESPECTIVELY.

EPOXY GROUTED BARS, IN HOLES ACCORDING TO ARTICLE 584 OF THE STANDARD SPECIFICATIONS.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 OR GR 60. SEE SPECIAL PROVISIONS.

THE COST OF EPOXY GROUTING BARS SHALL BE INCLUDED WITH REINFORCEMENT BARS (EPOXY COATED).

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.



David Carl Puzey 12/4/14
Expires 11/30/16

BILL OF MATERIALS

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	10	#5	3'-9"	—
h ₁ (E)	6	#5	11'-4 1/2"	—
v(E)	10	#5	3'-7"	—
v ₁ (E)	4	#5	4'-3"	—
v ₂ (E)	4	#5	5'-0"	—
v ₃ (E)	4	#5	5'-9"	—
CONCRETE STRUCTURES			CU. YD.	1.8
REINFORCEMENT BARS, EPOXY COATED			POUND	220
CONCRETE REMOVAL			CU. YD.	1.2
PROTECTIVE COAT			SQ. YD.	8.0

**WINGWALL REPLACEMENT
STRUCTURE 074-0051
DOUBLE 9'x4' R.C. BOX CULVERT
UNDER FAI-74
STATION 1234+00**

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WINGWALL REPLACEMENT
S.N. 074-0051**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(74-2)RS-2 & (74-3)RS-3	PIATT	310	178
CONTRACT NO. 70717				
[ILLINOIS] FED. AID PROJECT				

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
c:\pw\work\p\idot\ee\ing\0200193\0570	#eejng	ESS	-
		DRAWN :	REVISED :
		ESS	-
		CHECKED :	REVISED :
		TJB	-
		DATE :	REVISED :
		4-10-2013	-
		PLOT SCALE :	
		40.0000 / 1"	
		PLOT DATE :	
		10/16/2014	

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

GUARDRAIL & INLET BOX DETAIL FOR F.A.I.-74

S.N. 074-0042 (E.B.) & S.N. 074-0043 (W.B.)

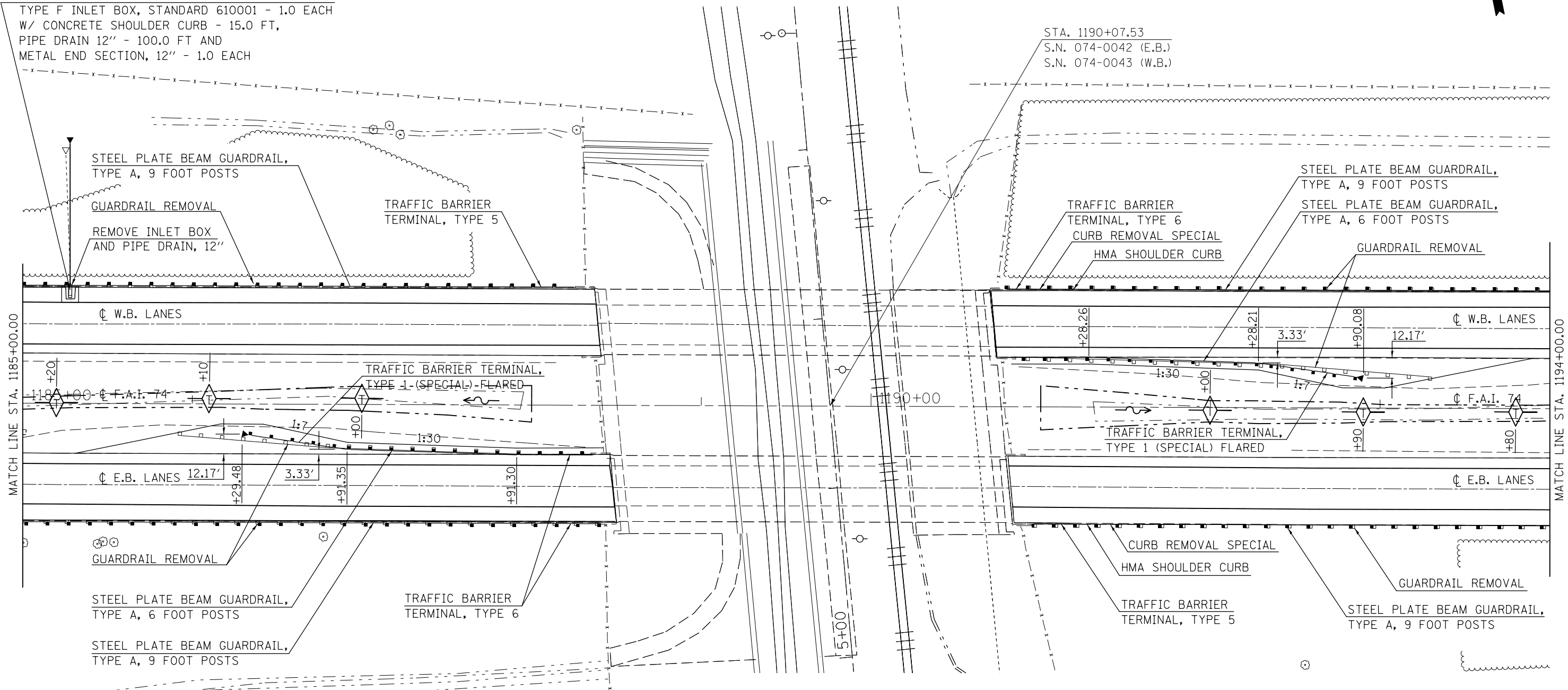
SHEET 2 OF 4



STA. 1185+28.00

TYPE F INLET BOX, STANDARD 610001 - 1.0 EACH
W/ CONCRETE SHOULDER CURB - 15.0 FT,
PIPE DRAIN 12" - 100.0 FT AND
METAL END SECTION, 12" - 1.0 EACH

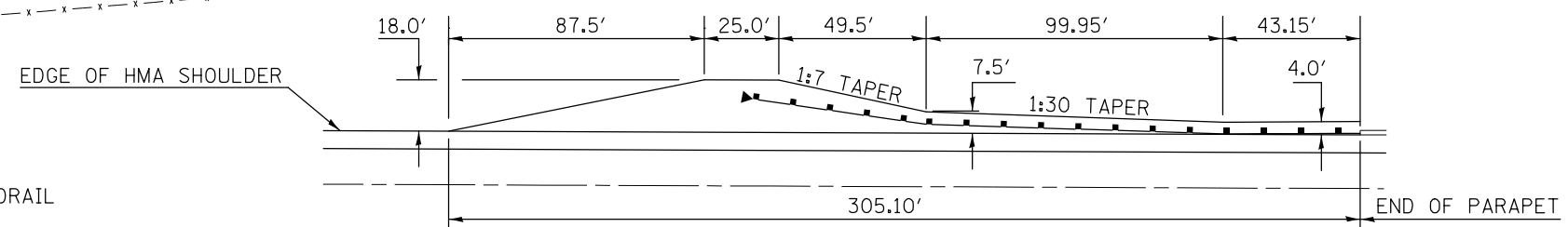
STA. 1190+07.53
S.N. 074-0042 (E.B.)
S.N. 074-0043 (W.B.)



MATCH LINE STA. 1185+00.00

MATCH LINE STA. 1194+00.00

MEDIAN SHOULDER WIDENING, (TYP.)



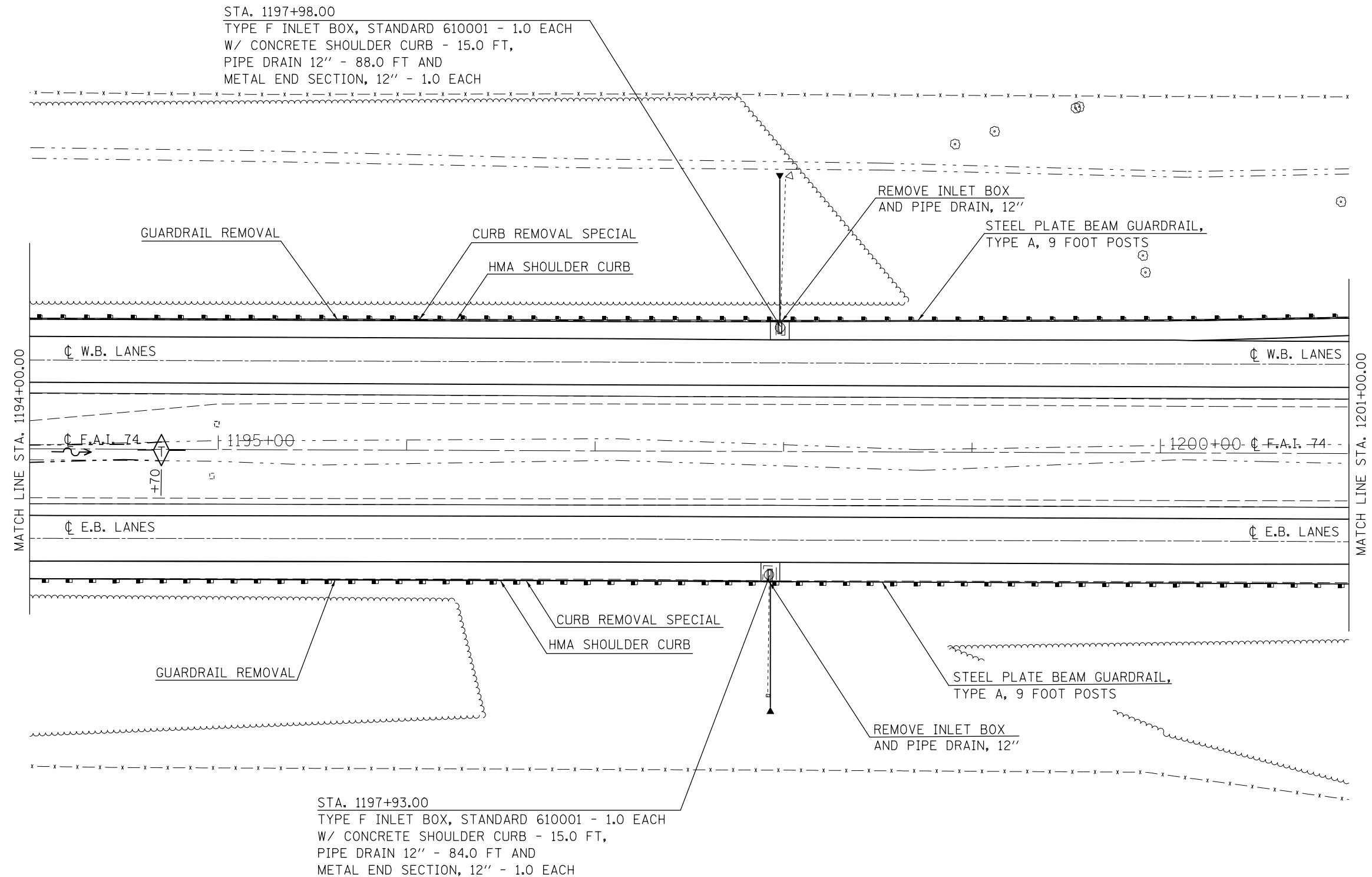
NOTE:
SEE SCHEDULES FOR PROPOSED STATIONS AND
QUANTITIES FOR B-CURB, PIPE DRAINS & GUARDRAIL

FILE NAME =	USER NAME = eaglinge	DESIGNED - GAE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GUARDRAIL & INLET BOX DETAIL FOR F.A.I.-74 S.N. 074-0042 (E.B.) & 074-0043 (W.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ci:\pw\work\p\midot\ea\linge\d0200185\0574717-sht-details.dgn	PLOT SCALE = 60.0000' / in.	DRAWN - BBP	REVISED -			74	•	PIATT	310	182	
\$MODELNAME\$	PLOT DATE = 10/16/2014	CHECKED -	REVISED -			(74-2)RS-2 & (74-3)RS-3		CONTRACT NO. 70717		ILLINOIS FED. AID PROJECT	
		DATE - 04/04/13	REVISED -			SCALE: 1" = 30'		SHEET 2 OF 4 SHEETS		STA. 1185+00.00 TO STA. 1194+00.00	

GUARDRAIL & INLET BOX DETAIL FOR F.A.I.-74

S.N. 074-0042 (E.B.) & S.N. 074-0043 (W.B.)

SHEET 3 OF 4



NOTE:
SEE SCHEDULES FOR PROPOSED STATIONS AND
QUANTITIES FOR B-CURB, PIPE DRAINS & GUARDRAIL

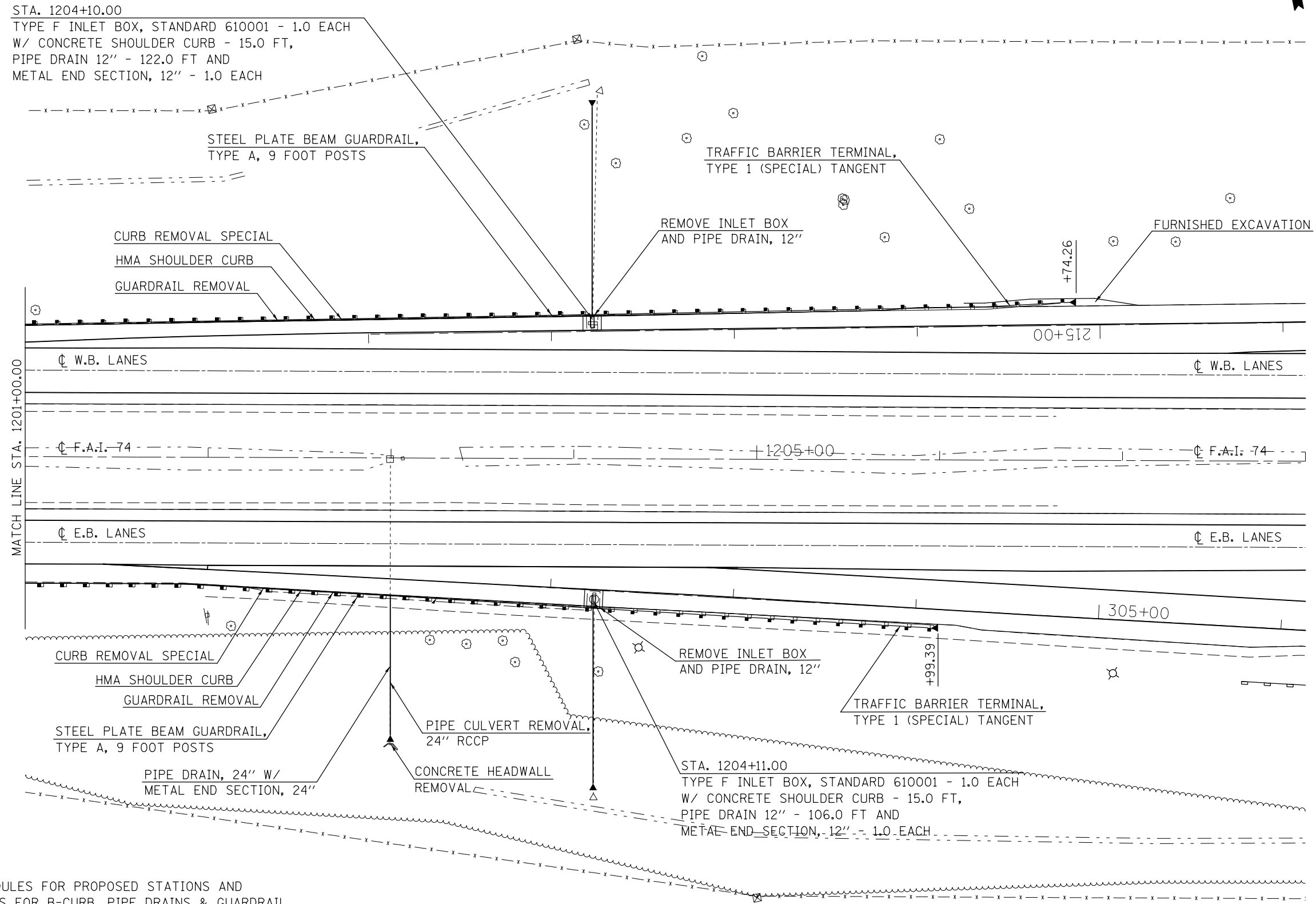
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		DRAWN - BBP	REVISED -			74		PIATT	310	183	
	PLOT SCALE = 60.0000' / in.	CHECKED -	REVISED -			(74-2)RS-2 & (74-3)RS-3		CONTRACT NO. 70717			
\$MODELNAME\$	PLOT DATE = 10/16/2014	DATE - 04/04/13	REVISED -			SCALE: 1" = 30'		SHEET 3 OF 4 SHEETS		STA. 1194+00.00 TO STA. 1201+00.00	

ILLINOIS FED. AID PROJECT

GUARDRAIL & INLET BOX DETAIL FOR F.A.I.-74

S.N. 074-0042 (E.B.) & S.N. 074-0043 (W.B.)

SHEET 4 OF 4



NOTE:
SEE SCHEDULES FOR PROPOSED STATIONS AND
QUANTITIES FOR B-CURB, PIPE DRAINS & GUARDRAIL

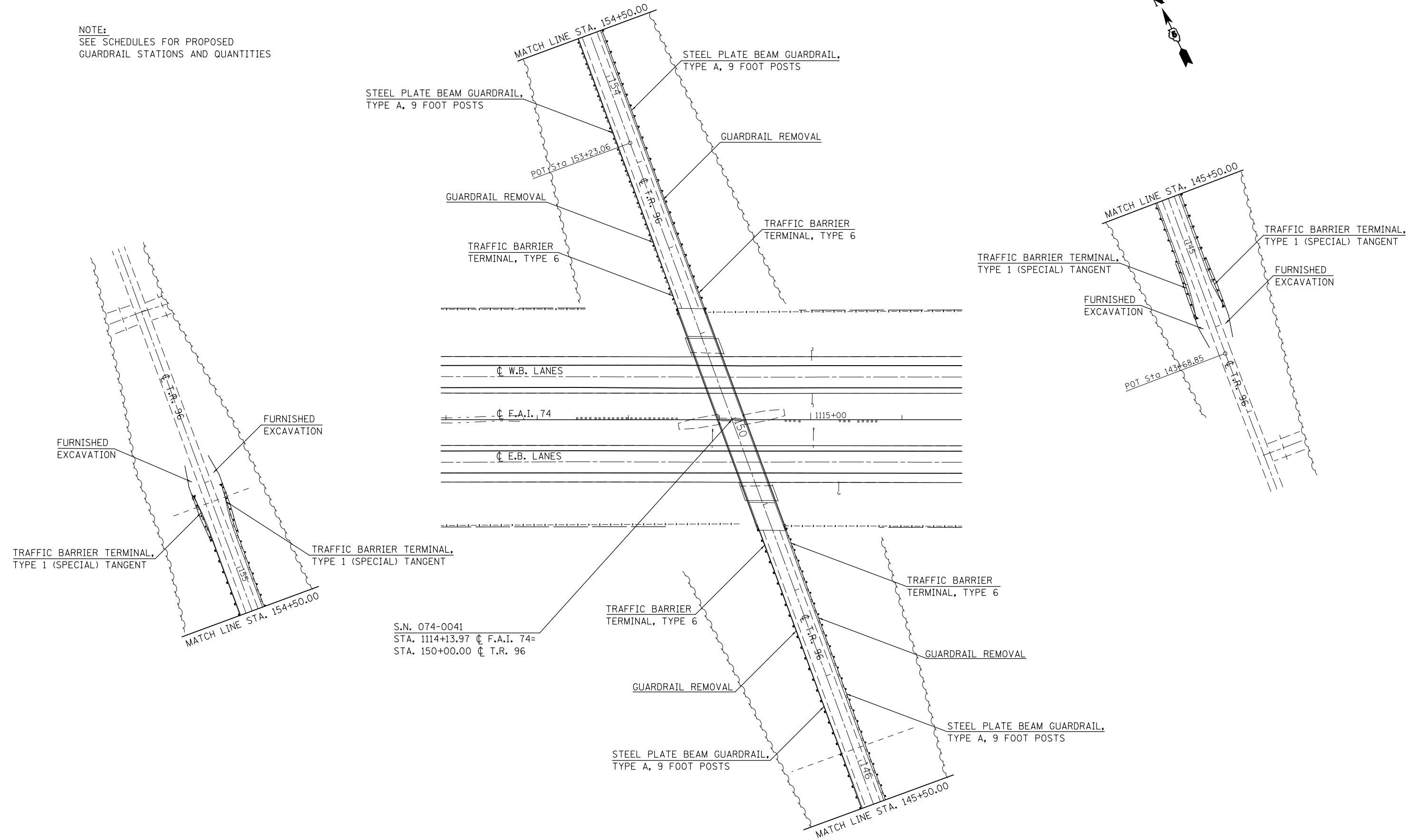
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ci:\pw\work\p\dot\ea\linge\d\2008185\0574717-sht-details.dgn		DRAWN - BBP	REVISED -			74		PIATT	310	184	
PLOT SCALE = 60.0000' / in.		CHECKED -	REVISED -			(74-2)RS-2 & (74-3)RS-3		CONTRACT NO. 70717			
\$MODELNAME\$		DATE - 04/04/13	REVISED -			SCALE: 1" = 30'		SHEET 4 OF 4 SHEETS		STA. 1201+00.00 TO STA. 1208+00.00	

ILLINOIS FED. AID PROJECT

GUARDRAIL DETAIL FOR T.R. 96

S.N. 074-0041

NOTE:
SEE SCHEDULES FOR PROPOSED
GUARDRAIL STATIONS AND QUANTITIES



S.N. 074-0041
STA. 1114+13.97 \oslash F.A.I. 74=
STA. 150+00.00 \oslash T.R. 96

FILE NAME =	USER NAME = eaglinge	DESIGNED - GAE	REVISED -
et:\pw\work\p\dot\ea\linge\d0200185\0570717-sht-details.dgn		DRAWN - BBP	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
\$MODELNAME\$	PLOT DATE = 10/16/2014	DATE - 12/13/12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL DETAIL FOR T.R. 96
S.N. 074-0041

SCALE: 1" = 50' SHEET 1 OF 1 SHEETS STA. TO STA.

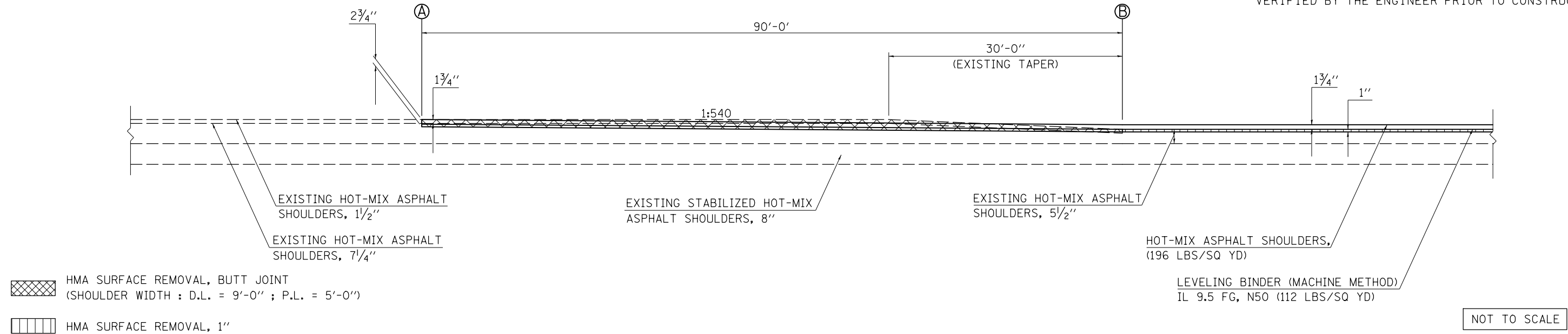
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	•	PIATT	310	186
*(74-2)RS-2 & (74-3)RS-3			CONTRACT NO. 70717	
ILLINOIS FED. AID PROJECT				

DETAIL FOR I-74 MILLING & PAVING TRANSITION AT BEGINNING OF PROJECT

DRIVING & PASSING LANE SHOULDER

	STATION	TO	STATION
E. B.	(A) 908+65.00		909+55.00 (B)
W. B.	(A) 909+14.00		910+04.00 (B)

NOTE:
THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.

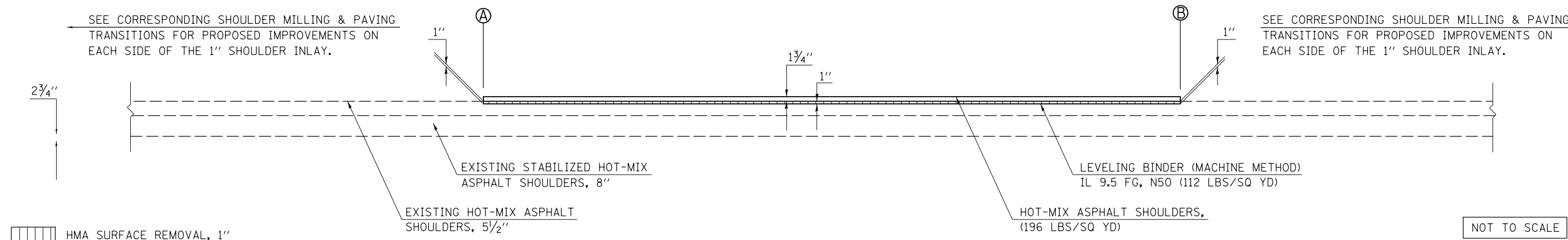


DETAIL FOR I-74 MAINLINE SHOULDER MILLING & PAVING TRANSITION

SHOULDER INLAY PRIOR TO RESURFACING

EASTBOUND			WESTBOUND					
	STATION	TO	STATION		STATION	TO	STATION	
(A)	909+55.00		918+15.00	(B)	(A) 910+04.00		919+75.00	(B)
(A)	925+75.00		1005+23.00	(B)	(A) 927+40.00		1004+16.00	(B)
(A)	1010+33.00		1056+30.00	(B)	(A) 1011+06.00		1056+78.00	(B)

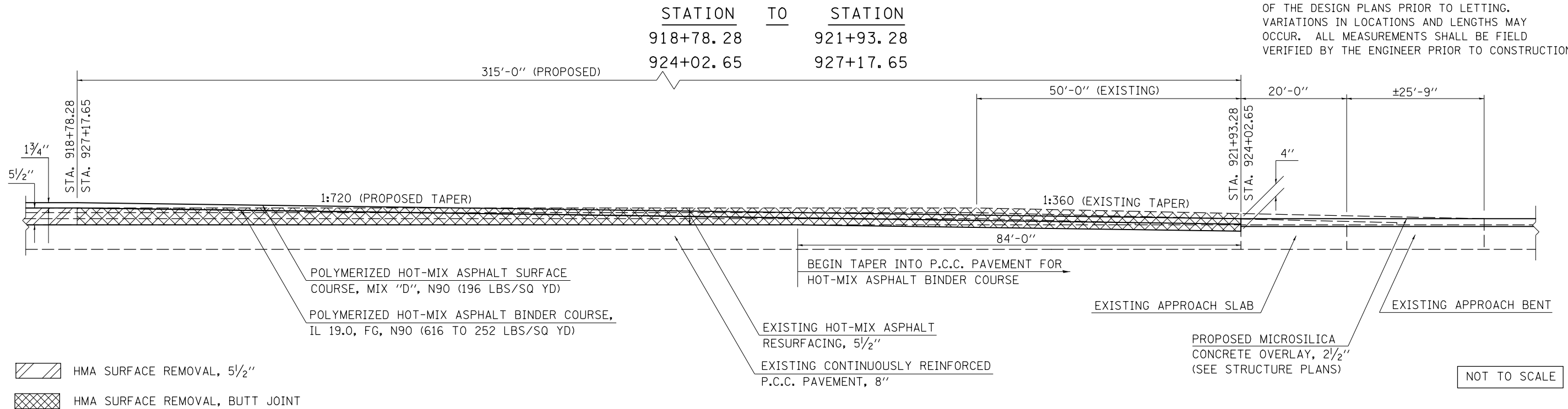
NOTE:
THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0038

WESTBOUND DRIVING LANE

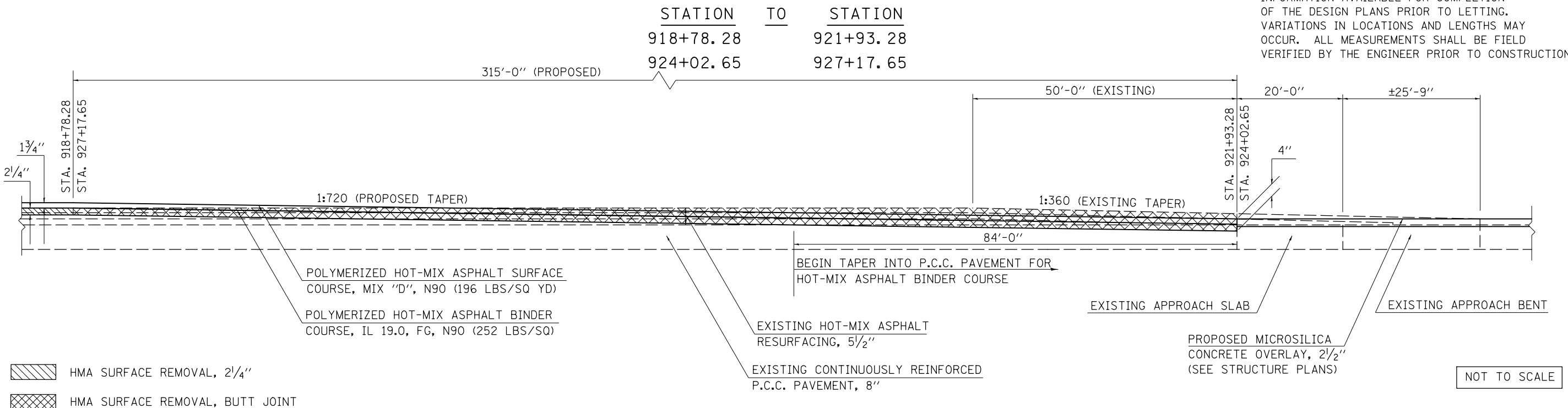
NOTE:
THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0038

WESTBOUND PASSING LANE

NOTE:
THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.

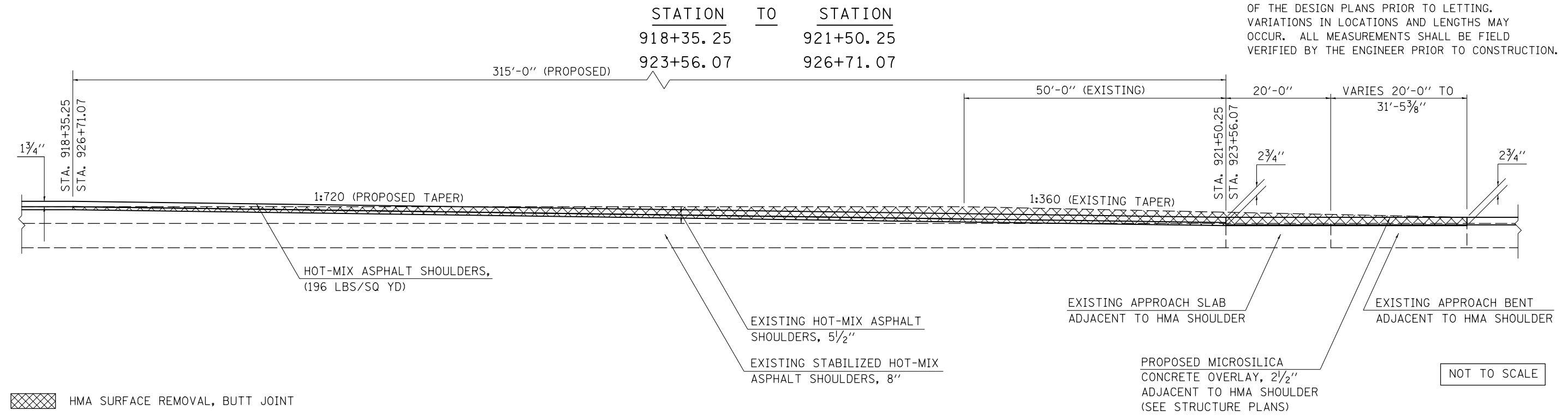


FILE NAME =	USER NAME = eaglino	DESIGNED - GAE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MILLING & PAVING TRANSITION DETAILS F.A.I. 74 (I-74)	F.A.I. RTE. 74	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw\work\p\dot\ea\glino\d0200185\0570717-sht-details.dgn	PLOT SCALE = 40.0000' / in.	DRAWN - BBP	REVISED -			PIATT	310	190		
MODELNAME	PLOT DATE = 10/16/2014	CHECKED -	REVISED -			(74-2)RS-2 & (74-3)RS-3	CONTRACT NO. 70717			
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0037

EASTBOUND DRIVING & PASSING LANE SHOULDER

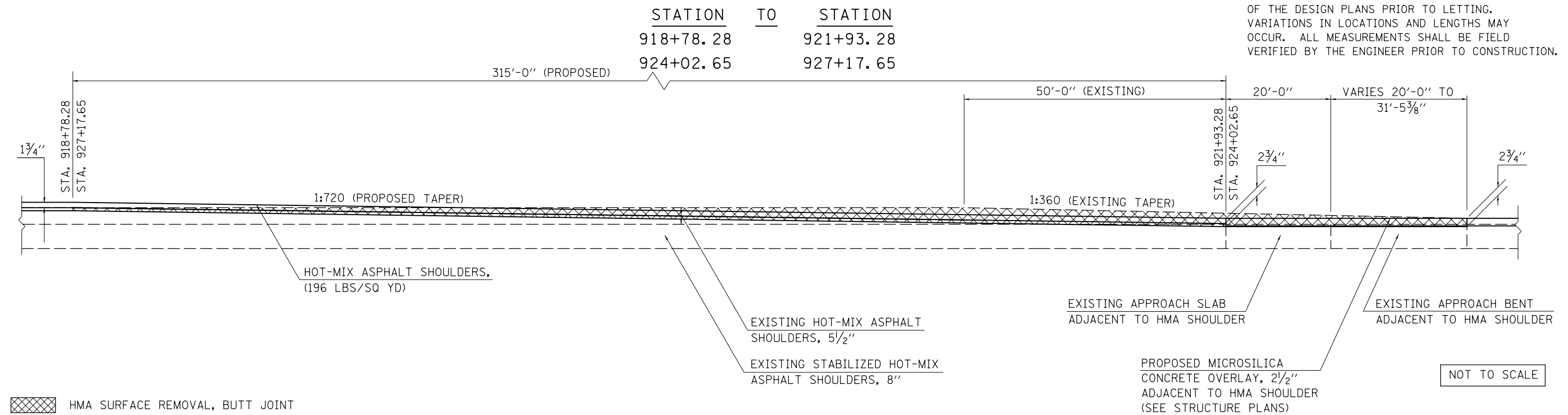
NOTE:
THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0038

WESTBOUND DRIVING & PASSING LANE SHOULDER

NOTE:
THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0039

EASTBOUND DRIVING LANE

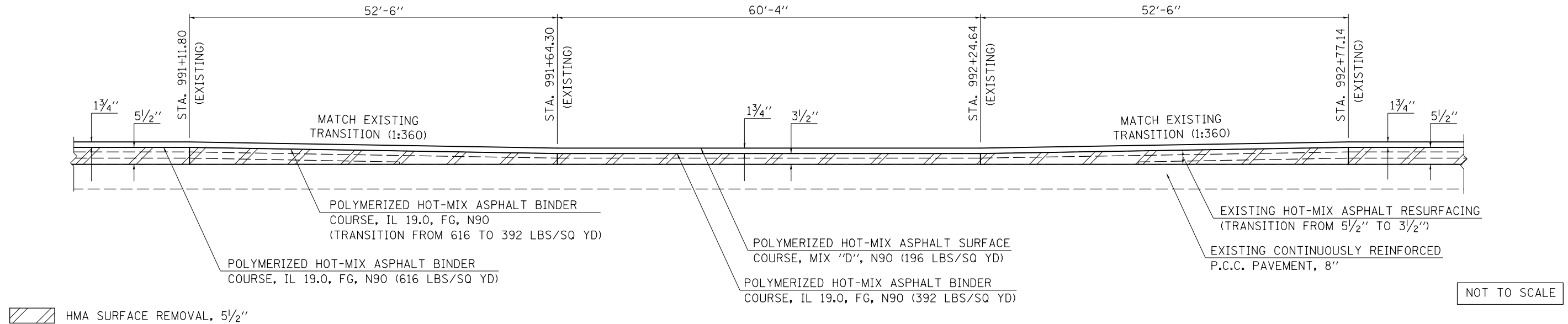
STATION TO STATION
991+11.80 TO 992+77.14

NOTE:

THE TRANSITION AREA TO BE MILLED AT THE ACROSS ROAD STRUCTURE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR HOT-MIX ASPHALT SURFACE REMOVAL, 5-1/2" AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE VARIABLE THICKNESSES.

NOTE:

THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



NOT TO SCALE

DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0039

EASTBOUND PASSING LANE

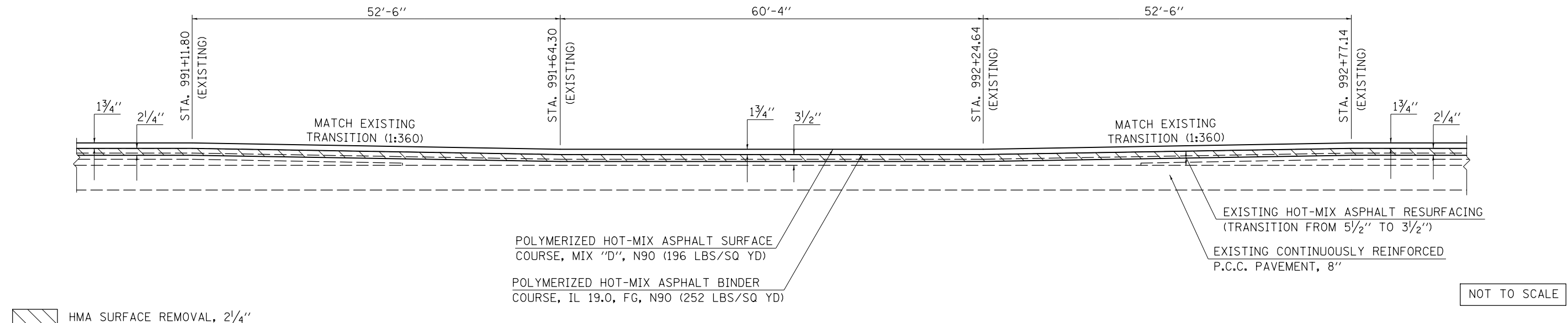
STATION TO STATION
991+11.80 TO 992+77.14

NOTE:

THE TRANSITION AREA TO BE MILLED AT THE ACROSS ROAD STRUCTURE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR HOT-MIX ASPHALT SURFACE REMOVAL, 2-1/4" AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR ANY VARIABLE THICKNESSES.

NOTE:

THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



NOT TO SCALE

FILE NAME =	USER NAME = eaglinge	DESIGNED - GAE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MILLING & PAVING TRANSITION DETAILS F.A.I. 74 (I-74)	F.A.I. RTE. 74	SECTION •	COUNTY PIATT	TOTAL SHEETS 310	SHEET NO. 192		
ci:\pw\work\p\idot\ea\linge\d0200185\0570717-sht-details.dgn	PLOT SCALE = 40.0000' / in.	DRAWN - BBP	REVISED -			SCALE:	SHEET 6 OF 17 SHEETS	STA.	TO STA.	CONTRACT NO. 70717		
#MODELNAME#	PLOT DATE = 10/16/2014	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						
		DATE -	REVISED -									

DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0039

WESTBOUND DRIVING LANE

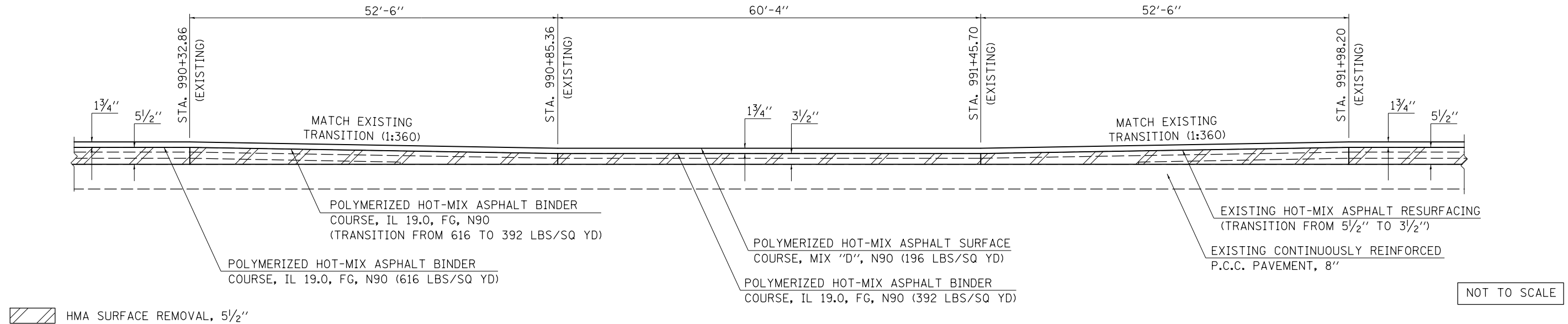
STATION TO STATION
990+32.86 TO 991+98.20

NOTE:

THE TRANSITION AREA TO BE MILLED AT THE ACROSS ROAD STRUCTURE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR HOT-MIX ASPHALT SURFACE REMOVAL, 5-1/2" AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE VARIABLE THICKNESSES.

NOTE:

THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0039

WESTBOUND PASSING LANE

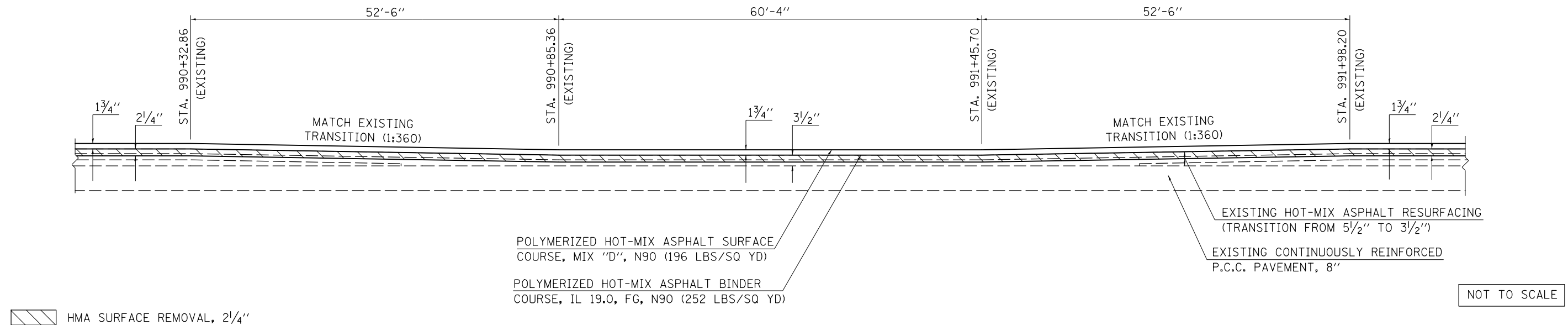
STATION TO STATION
990+32.86 TO 991+98.20

NOTE:

THE TRANSITION AREA TO BE MILLED AT THE ACROSS ROAD STRUCTURE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR HOT-MIX ASPHALT SURFACE REMOVAL, 2-1/4" AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR ANY VARIABLE THICKNESSES.

NOTE:

THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



FILE NAME =	USER NAME = eaglino	DESIGNED - GAE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MILLING & PAVING TRANSITION DETAILS F.A.I. 74 (I-74)	F.A.I. RTE. 74	SECTION •	COUNTY PIATT	TOTAL SHEETS 310	SHEET NO. 193	
	ci:\pw\work\p\dot\ea\lino\d0200185\0570717-sht-details.dgn	DRAWN - BBP	REVISED -					•(74-2)RS-2 & (74-3)RS-3		CONTRACT NO. 70717	
	PLOT SCALE = 48.0000' / in.	CHECKED -	REVISED -					ILLINOIS FED. AID PROJECT			
#MODELNAME#	PLOT DATE = 10/16/2014	DATE -	REVISED -				SCALE:	SHEET 7	OF 17 SHEETS	STA.	TO STA.

DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0039

EASTBOUND DRIVING & PASSING LANE SHOULDER

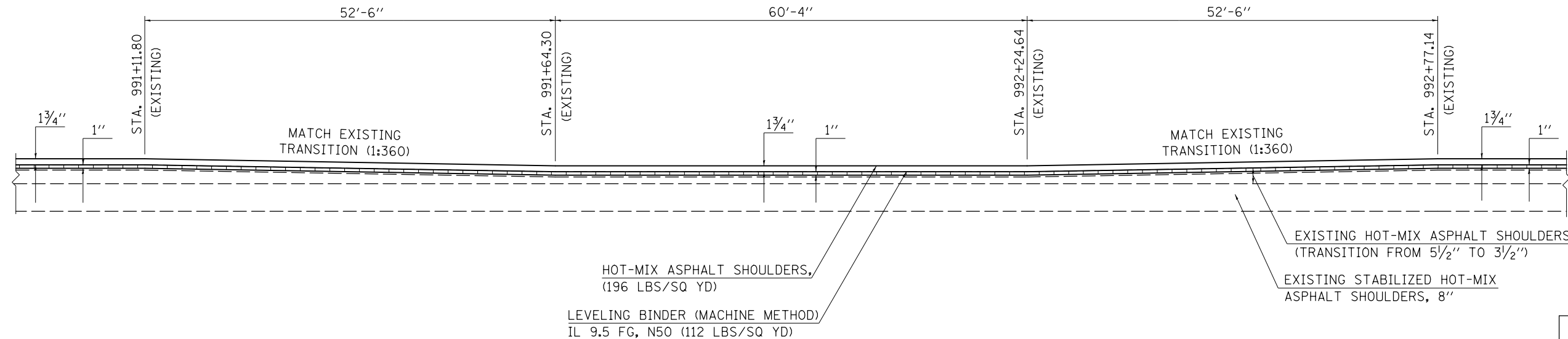
NOTE:

THE TRANSITION AREA TO BE MILLED AT THE ACROSS ROAD STRUCTURE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR HOT-MIX ASPHALT SURFACE REMOVAL, 1" AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR ANY VARIABLE THICKNESSES.

STATION TO STATION
991+11.80 992+77.14

NOTE:

THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



□□□ HMA SURFACE REMOVAL, 1"

NOT TO SCALE

DETAIL FOR I-74 MILLING & PAVING TRANSITION AT S.N. 074-0039

WESTBOUND DRIVING & PASSING LANE SHOULDER

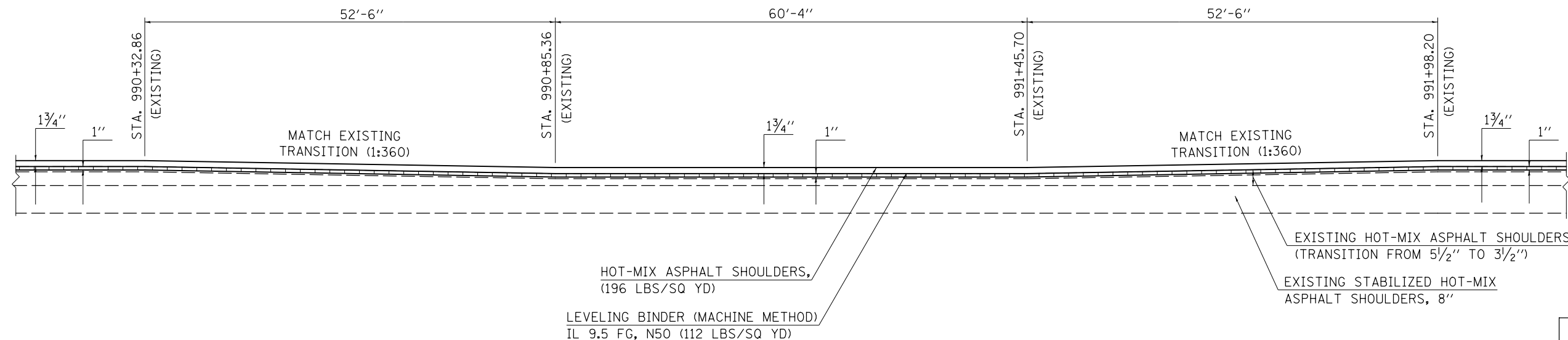
NOTE:

THE TRANSITION AREA TO BE MILLED AT THE ACROSS ROAD STRUCTURE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR HOT-MIX ASPHALT SURFACE REMOVAL, 1" AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR ANY VARIABLE THICKNESSES.

STATION TO STATION
990+32.86 991+98.20

NOTE:

THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



□□□ HMA SURFACE REMOVAL, 1"

NOT TO SCALE

FILE NAME =	USER NAME = eaglino	DESIGNED - GAE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MILLING & PAVING TRANSITION DETAILS F.A.I. 74 (I-74)	F.A.I. RTE. = 74	SECTION =	COUNTY = PIATT	TOTAL SHEETS = 310	SHEET NO. = 194		
ci:\pw\work\p\dot\ea\glino\d0200185\0570717-sht-details.dgn	PLOT SCALE = 40.0000' / in.	DRAWN - BBP	REVISED -			SCALE:	SHEET 8 OF 17 SHEETS	STA.	TO STA.	CONTRACT NO. 70717		
#MODELNAME#	PLOT DATE = 10/16/2014	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						
		DATE -	REVISED -									

DETAIL FOR I-74 MILLING & PAVING TRANSITION UNDER S.N. 074-0040

WESTBOUND DRIVING LANE

NOTE:

THE TRANSITION AREA TO BE MILLED UNDER THE OVERHEAD STRUCTURE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR HOT-MIX ASPHALT SURFACE REMOVAL, 5-1/2" AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE VARIABLE THICKNESSES.

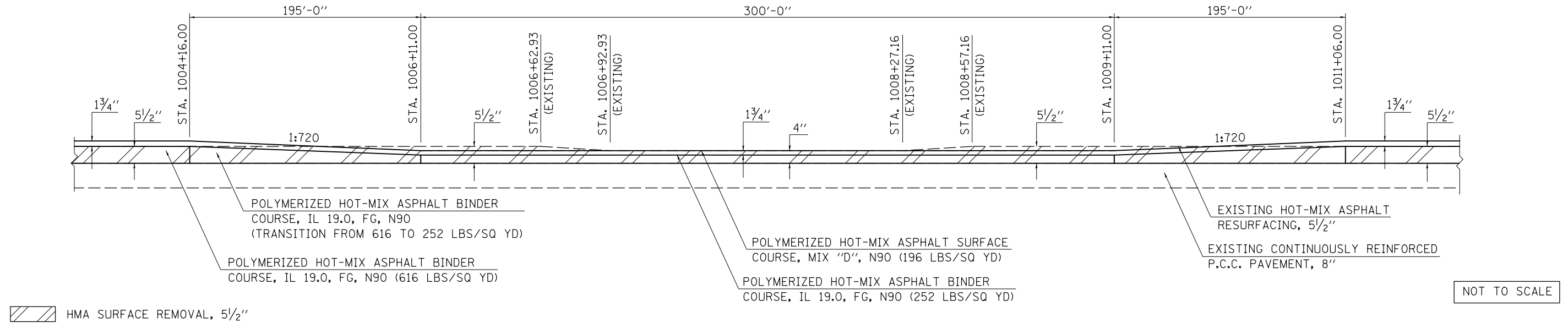
NOTE:

UPON COMPLETION OF THE PROJECT, THE VERTICAL CLEARANCES OF ALL AFFECTED OVERHEAD STRUCTURES SHALL BE VERIFIED AND REPORTED TO THE BUREAU OF OPERATIONS BY THE RESIDENT ENGINEER.

STATION TO STATION
1004+16.00 TO 1011+06.00

NOTE:

THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



DETAIL FOR I-74 MILLING & PAVING TRANSITION UNDER S.N. 074-0040

WESTBOUND PASSING LANE

NOTE:

THE TRANSITION AREA TO BE MILLED UNDER THE OVERHEAD STRUCTURE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR HOT-MIX ASPHALT SURFACE REMOVAL, 4" AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE VARIABLE THICKNESSES.

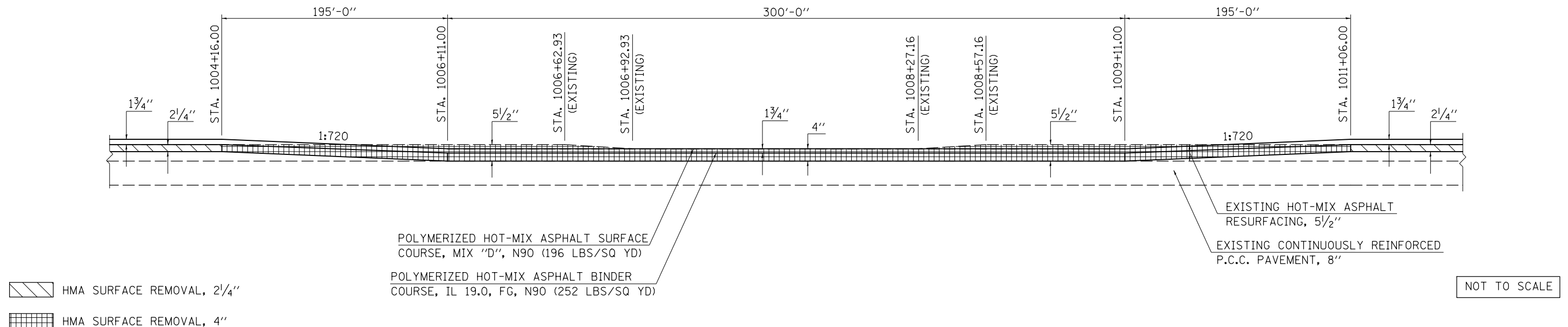
NOTE:

UPON COMPLETION OF THE PROJECT, THE VERTICAL CLEARANCES OF ALL AFFECTED OVERHEAD STRUCTURES SHALL BE VERIFIED AND REPORTED TO THE BUREAU OF OPERATIONS BY THE RESIDENT ENGINEER.

STATION TO STATION
1004+16.00 TO 1011+06.00

NOTE:

THE VARIOUS PAY ITEMS REPRESENT THE BEST INFORMATION AVAILABLE FOR COMPLETION OF THE DESIGN PLANS PRIOR TO LETTING. VARIATIONS IN LOCATIONS AND LENGTHS MAY OCCUR. ALL MEASUREMENTS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.



FILE NAME =	USER NAME = eaglimga	DESIGNED - GAE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MILLING & PAVING TRANSITION DETAILS F.A.I. 74 (I-74)	F.A.I. RTE. 74	SECTION •	COUNTY PIATT	TOTAL SHEETS 309	SHEET NO. 196
et:\pw\work\p\midot\ea\glimga\d0200185\0570717-sht-details.dgn		DRAWN - BBP	REVISED -			•(74-2)RS-2 & (74-3)RS-3		CONTRACT NO. 70717		
PLOT SCALE = 48.0000 ' / in.		CHECKED -	REVISED -		SCALE: NONE	SHEET 10	OF 17	SHEETS	STA.	TO STA.
PLOT DATE = 10/16/2014		DATE -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

